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ABSTRACT

This project report consists of several parts. The first section describes the project conducted to develop articulation agreements in vocational education between secondary and postsecondary institutions in Virginia. Outlines of the project's phases are provided; these include development of mini-project funding requests, awarding of funding, technical assistance, and preparation of final drafts of articulation agreements. Project evaluation results and recommendations are given. Appendixes include lists of advisory committee members and their recommendations, documentation of mini-project funding and reporting procedures, a summary of articulation activities, and survey results. The last section of the document is a secondary/postsecondary articulation handbook written by Charles W. Curry. The handbook outlines factors limiting vocational education articulation, existing articulation problems, strategies for developing articulation agreements, and appendixes containing terms and definitions, sample correspondence, agreement plan formats, student records, and reference materials. (KC)

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ANNUAL REPORT

Vocational Education Articulation Project

Research Project

Conducted Under
Vocational Education Amendments of 1976
Public Law 94-482

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June 1, 1985

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Abstract

Vocational Education Articulation Project

Funding Period: July 1, 1984 to June 30, 1985

The purpose of the Articulation of Vocational Education Project is to introduce and initiate the development of articulation agreements between secondary and postsecondary institutions in Virginia. This purpose was accomplished through the following objectives:

1. Maintain current advisory committee of secondary and postsecondary personnel.
2. Develop "mini project" funding requests to assist public schools and the community college within a community college service region develop and implement articulation plans and agreements.
3. Maintain current Funding Request Review Panel.
4. Maintain system which reviews and authorizes "mini project" funding.
5. Establish and maintain system which reviews and recommends reimbursement of "mini projects" for expenses incurred in accordance with project objectives.
6. Develop and disseminate materials which will aid community colleges and public schools in the development of articulation plans and agreements.
7. Promote the development of articulation agreements in community college service regions which are not yet involved in articulation.
8. Provide workshops, seminars and presentations in community college service regions to introduce articulation to those service regions not currently involved in articulation.
9. Assist "mini projects" in the development of articulation plans and agreements.
10. Facilitate the development of articulation agreements between secondary and postsecondary institutions.
11. Provide technical assistance to public schools and community colleges developing and/or implementing articulation agreements.
12. Evaluate existing articulation agreements.

In order to accomplish the objectives listed above, the following procedures were used:

Phase 1 Develop "mini project" funding requests. Publicize the availability of funds for "mini projects" and send applications for funding requests to all public school superintendents and community college presidents with letters of information going to all local vocational directors and community college deans.

Phase 2 Review "mini project" submissions; select and award funding to those projects which meet appropriate criteria and for which sufficient funds are available.

Phase 3 Provide technical assistance in the way of workshops, seminars, presentations and consultations to projects and community college service regions involved in developing articulation plans and agreements.

Phase 4 Obtain final drafts of approved articulation agreement from all projects and other service regions involved in articulation. Review final project submissions and authorize final reimbursement of "mini project" expenditures.

The Vocational Education Articulation Project resulted in the following accomplishments:

1. Developed and distributed secondary/postsecondary vocational program grids for the 23 community college service regions.
2. Conducted 25 articulation workshops, presentations and seminars.
3. Conducted articulation evaluation survey on the 15 "mini projects" involved in the project this year.
4. Developed nine articulation agreements in nine community college service regions.
5. Developed six articulation plans in five community college service regions.
6. At this time all 23 community college service regions are involved in the development of some stage of an articulation agreement.

Survey and Conclusions

The administrators, faculty and counselors involved in the 15 "mini project" service regions were surveyed. The overall response rate was approximately 45 percent. A summary of the results indicated that articulation should be beneficial for the students in that they would be motivated to do better work and better quality students would be attracted to the programs. Cooperation between community college and public school personnel was greatly improved and 89% of the respondents felt articulation should be expanded to include other programs at their institution.

Recommendations for Future Articulation Activities

1. The State Department of Education and the Virginia Community College System should continue to support a state-wide effort to coordinate the articulation of vocational programs.
2. "Mini projects" of $1000 to $1500 each should be established during 1985-86 to allow service regions to continue their efforts to develop and/or expand articulation.
3. The articulation advisory committee should be continued to provide guidance and direction for those working with the 1985-86 "mini projects".
4. The articulation advisory committee should be available to assist the State Board of Education, the State Board of Community Colleges and the State Council of Higher Education in the development of state-wide articulation policy.

Title of Project: Vocational Education Articulation Project

Problem:

Vocational education in Virginia's community colleges is expanding. This vocational education complements that which is already occurring in secondary schools and vocational centers in Virginia. In order to address the need for increased training and facilitate the smooth transfer of secondary vocational students wishing to continue their education in their chosen field, the integration of secondary and community college vocational programs is necessary. Articulation is a process which facilitates these transfers and formal articulation agreements are necessary to assure that these opportunities are available to all eligible students. The purpose of this project is to introduce and initiate the development of articulation agreements between secondary and postsecondary institutions in Virginia.

Objectives:

1. Maintain current advisory committee of secondary and postsecondary personnel.

2. Develop "mini project" funding requests to assist public schools and the community college within a community college service region develop and implement articulation plans and agreements.

3. Maintain current Funding Request Review Panel.

4. Maintain system which reviews and authorizes "mini project" funding.

5. Establish and maintain system which reviews and recommends reimbursement of "mini projects" for expenses incurred in accordance with project objectives.

6. Develop and disseminate materials which will aid community colleges and public schools in the development of articulation plans and agreements.

7. Promote the development of articulation agreements in community college service regions which are not yet involved in articulation.

8. Provide workshops, seminars and presentations in community college service regions to introduce articulation to those service regions not currently involved in articulation.

9. Assist "mini projects" in the development of articulation plans and agreements.

10. Facilitate the development of articulation agreements between secondary and postsecondary institutions.

11. Provide technical assistance to public schools and community colleges developing and/or implementing articulation agreements.

12. Evaluate existing articulation agreements.

Project Design:

In order to promote and initiate the development of formal articulation agreements between secondary and postsecondary vocational programs, the project was divided into four phases. These phases are as follows:

Phase 1 Develop "mini project" funding requests. Publicize the availability of funds for "mini projects" and send applications for funding requests to all public school superintendents and community college presidents with letters of information going to all local vocational directors and community college deans.

Phase 2 Review "mini project" submissions; select and award funding to those projects which meet appropriate criteria and for which sufficient funds are available.

Phase 3 Provide technical assistance in the way of workshops, seminars, presentations and consultations to projects and community college service regions involved in developing articulation plans and agreements.

Phase 4 Obtain final drafts of approved articulation agreement from all projects and other service regions involved in articulation. Review final project submissions and authorize final reimbursement of "mini project" expenditures.

The roles of the project director and the half-time project secretary were to initiate and carry out the four phases of the project. This was accomplished through the following procedures.

Procedures for Implementation:

1. Identify key public school and community college personnel to serve on advisory committee.

2. Using telephone contacts, personal visitation and the advisory committee, determine articulation needs of community college service regions in Virginia.

3. Using mailings and joint community college and public school administrator sessions, provide information on models and services available to assist in the development of articulation agreements.

4. Develop requirements for "mini project" requests.

5. Develop format for the submission of the requests for "mini projects".

6. Develop reimbursement procedures for those that receive "mini projects".

7. Notify interested community colleges of the availability of the "mini projects".

8. Review requests submitted and award "mini projects".

9. Conduct workshops and seminars to assist community colleges and public schools develop articulation plans.

10. Conduct evaluation of articulation agreements already established in Virginia.

11. Reimburse schools receiving "mini projects".

Results and Accomplishments:

This section includes a summary of the activities conducted by the project. The activities are listed by the objective they were intended to accomplish. However, rarely did any activity focus on accomplishing only one objective. Therefore, the placement of some of the activities is arbitrary and their placement under several objectives is possible.

1. Maintain current advisory committee of secondary and postsecondary personnel.

   The advisory committee membership is included in Appendix A.

   September 10, 1984 - A subcommittee of the project advisory committee met in Richmond to identify areas that the State Department of Education and the Virginia Community College System might further facilitate the development of articulation agreements. The membership list and minutes of the meeting appear in Appendix B.

   May 20, 1985 - Final meeting of the project advisory committee to review progress made toward developing articulation agreements in the 23 community college service regions in Virginia and to make recommendations for future activities in the area of articulation.

2. Develop "mini project" funding requests to assist public schools and the community college within a community college service region develop and implement articulation plans and agreements.

   July 11, 1984 - "Mini project" solicitation memorandum was developed and sent to all 207 public school superintendents and 23 community college presidents. A follow-up letter was also sent to deans of instruction and vocational directors. (A copy of the memorandum appears in Appendix C.)

   August 10, 1984 - Twenty "mini project" requests were submitted to the Project Director.

   September 26, 1984 - "Mini project" contracts were mailed to project heads whose projects were awarded funding.

3. Maintain current Funding Request Review Panel.

   The membership list of the Funding Request Review Panel is included in Appendix D.

4. Maintain system which reviews and authorizes "mini project" funding.

   August 17, 1984 - A meeting of the Funding Request Review Panel was held in Richmond. The panel reviewed and established criteria and made recommendations for funding the 1984-85 "mini project" requests.

   August 24, 1984 - A request for additional funds for the project to enable it to fund all "mini projects" was submitted (Appendix E).

   September 17, 1984 - Notification from Dr. Ned Swartz that additional funds requested were not available.

   September 19, 1984 - Letters of notification of award or refusal were sent to "mini project" heads (sample letters in Appendix F).

5. Establish and maintain system which reviews and recommends reimbursement of "mini projects" for expenses incurred in accordance with project objectives.

   March 22, 1985 - Memorandum was sent to all project heads indicating procedures and dates for submitting final "mini project" reports (Appendix G).

   May 7, 1985 - Final meeting of the Funding Request Review Panel was held in Richmond. The panel recommended that all "mini projects" be reimbursed (Appendix H).

6. Develop and disseminate materials which will aid community colleges and public schools in the development of articulation plans and agreements.

   July 25, 1984 - Mailed a copy of the Articulation of Vocational Programs: Secondary/Postsecondary Handbook to all deans of instruction and vocational directors (Appendix L).

   December 20, 1984 - Contacted and obtained directories for each of the six program areas in order to develop program grids for each of the 23 community college service regions. These grids will aid in identifying possible areas for articulation.

   February 1, 1985 - Correspondence developed and sent to obtain secondary and community college program listings to enable the development of program grids for each of the 23 community college service regions in Virginia.

   February 10, 1985 - Drafts of program grids developed and distributed to two service regions, Virginia Western and Blue Ridge Community College service regions.

   March 5, 1985 - Draft program grids returned with comments. Work on developing program grids for each of the 21 remaining service regions begun.

   March 6, 1985 - Submitted status report on articulation in all 23 community college service regions (Appendix I).

June 7, 1985 - Program grids completed and mailed to all 23 community colleges and the directors of vocational education in all public school systems (Appendix J).

7. Promote the development of articulation agreements in community college service regions which are not yet involved in articulation.

   October 8, 1984 - Participated in the initial articulation meeting for New River Community College Service Region.

   October 15, 1984 - Participated in the initial articulation meeting for the Dabney Lancaster Community College Service Region.

   November 13, 1984 - Participated in the initial articulation meeting for the Lord Fairfax Community College Service Region.

   November 15, 1984 - Attended articulation meeting at Virginia Tech for community college and university officials to discuss possible program articulation between community colleges and Virginia Tech.

   November 16, 1984 - Participated in the initial articulation meeting for the Blue Ridge Community College Service Region.

   December 5, 1984 - Attended articulation meeting and ceremony for J. Sargeant Reynolds Community College Service Region.

   February 7, 1985 - Initial presentation on articulation made to administrators of John Tyler Community College.

8. Provide workshops, seminars and presentations in community college service regions to introduce articulation to those service regions not currently involved in articulation.

   October 11, 1984 - Planning session for workshop on articulation for the Virginia Western Community College Service Region.

   October 18, 1984 - Presentation on articulation for the New River Community College Service Region.

   November 1, 1984 - Participated in an articulation meeting for the Dabney Lancaster Community College Service Region.

   November 12, 1984 - Workshop on articulation for faculty and administrators of the Virginia Western Community College Service Region.

   November 16, 1984 - Participated in an articulation meeting for the Dabney Lancaster Community College Service Region.

   November 28, 1984 - Participated in an articulation meeting for the Blue Ridge Community College Service Region.

9. Assist "mini projects" in the development of articulation plans and agreements.

10. Facilitate the development of articulation agreements between secondary and postsecondary institutions.

11. Provide technical assistance to public schools and community colleges developing and/or implementing articulation agreements.

October 26, 1984 - Participated in an articulation meeting for the Virginia Western Community College Service Region.

November 5, 1984 - Participated in an articulation meeting for the Virginia Western Community College Service Region.

November 12, 1984 - Participated in an inservice articulation day with faculty and administration of the Virginia Western Community College Service Region.

January 9, 1985 - Participated in an articulation meeting for the Blue Ridge Community College Service Region.

January 21, 1985 - Articulation meeting at J. Sargeant Reynolds Community College.

January 22, 1985 - Participated in an articulation meeting at the South Campus of Rappahannock Community College.

January 29, 1985 - Participated in an articulation meeting for the Virginia Western Community College Service Region.

February 13, 1985 - Participated in an articulation meeting for the Rappahannock Community College Service Region.

February 20, 1985 - Participated in an articulation meeting for Virginia Highlands Community College Service Region.

February 28, 1985 - Participated in an articulation meeting for John Tyler Community College Service Region.

March 4, 1985 - Participated in an articulation meeting for Danville Community College Service Region.

March 6, 1985 - Participated in an articulation meeting for the Lord Fairfax Community College Service Region.

March 7, 1985 - Participated in an articulation meeting for the Wytheville Community College Service Region.

March 12, 1985 - Participated in an articulation meeting for Virginia Highlands Community College Service Region.

March 13, 1985 - Articulation committee meeting for the Virginia Western Community College Service Region.

March 14, 1985 - Participated in an articulation meeting for the Dabney S. Lancaster Community College Service Region.

March 15, 1985 - Participated in an articulation meeting for the Blue Ridge Community College Service Region.

12. Evaluate existing articulation agreements.

May 6, 1985 - Articulation survey was developed and mailed to all community college deans, vocational directors and vocational center principals in the 15 "mini project" service regions. The survey was intended to assess perceptions of articulation of the administrators, faculty and counselors who were involved in the process (survey letters and questionnaires in Appendix K).

May 16, 1985 - Preliminary summary of survey data and draft of the project's Final Report completed in preparation for the project advisory committee meeting on May 20, 1985.

May 23, 1985 - Final summary of survey data completed.

June 30, 1985 - Final Report of the Articulation of Vocational Programs in Virginia Project submitted to the Virginia State Department of Education.

Summary of State-Wide Articulation:

1. The following community college service regions have articulation agreements as a result of projects funded by the State Department of Education during 1979-1982 and have fully implemented these agreements.

   Central Virginia Community College Service Region
   Southwest Virginia Community College Service Region
   Thomas Nelson Community College Service Region

2. The following community college service regions have developed articulation agreements without the benefit of State Department of Education funds.

   Lord Fairfax Community College Service Region
   Wytheville Community College Service Region

3. The following community college service regions have developed program level articulation agreements as a result of funds provided by this year's articulation project.

   Dabney S. Lancaster Community College Service Region
   Danville Community College Service Region
   Eastern Shore Community College Service Region
   Lord Fairfax Community College Service Region
   New River Community College Service Region
   Rappahannock Community College Service Region
   Southside Virginia Community College Service Region
   Virginia Highlands Community College Service Region
   Virginia Western Community College Service Region
   Wytheville Community College Service Region

4. The following community college service region has developed an articulation plan as a result of participation in this year's articulation project.

   Blue Ridge Community College Service Region

5. The following community college service regions are involved in developing articulation plans as a result of participation in the articulation project.

   Germanna Community College Service Region
   John Tyler Community College Service Region
   Northern Virginia Community College
      Alexandria Campus Service Region
      Woodbridge Campus Service Region
   Patrick Henry Community College Service Region
   Paul D. Camp Community College Service Region

6. The following community college service regions are involved in partial articulation arrangements or in preparing articulation plans without the assistance of the articulation project.

   J. Sargeant Reynolds Community College Service Region
   Mountain Empire Community College Service Region
   Northern Virginia Community College Service Region
   Piedmont Virginia Community College Service Region
   Tidewater Community College Service Region

7. Table 1 provides a summary of the articulation status for each community college service region.

8. Table 2 provides a summary of the programs that have been articulated in each service region.

Evaluation of the Project:

Formal evaluations of the project's activities were not conducted. The meetings, seminars and workshops did not lend themselves to formal evaluation. However, constant feedback from "mini project" heads and participants indicated that the information and assistance provided by the project were most beneficial.

A survey was conducted of public school and community college administrators, faculty and counselors who participated in the 15 "mini projects" awarded by the project this year. In all cases, these institutions were just establishing articulation plans or agreements. Sixty survey instruments were sent to community college personnel and 372 were sent to public school personnel in the 15 community college service regions. The overall response rate was 45 percent with community college and public school response rates being 72 and 40 percent, respectively. In summary, the responses indicated, in public schools, 97 percent and in community colleges, 100 percent feel that articulation will benefit their students, and 89 and 88 percent, respectively, feel that articulation should be expanded to include other programs at their institutions.

Table 1

ARTICULATION STATUS FOR COMMUNITY COLLEGE SERVICE REGIONS

(as of June 30, 1985)

Articulation Plan	Articulation Agreement	Review & Modify Articulation Agreement	No Formal Articulation Plans or Agreements
SERVICE REGION	SERVICE REGION	SERVICE REGION	SERVICE REGION
- Blue Ridge	- Dabney S. Lancaster	- Central Virginia	- Piedmont Virginia
- Germanna	- Danville	- Southwest Virginia	- Northern Virginia
- John Tyler	- Eastern Shore	- Thomas Nelson	- Loudoun
- J. Sargeant Reynolds	- Lord Fairfax		
- Mountain Empire	- New River		
- Northern Virginia	- Northern Virginia		
- Woodbridge ('85)	- Alexandria ('85)		
- Patrick Henry	- Annandale ('84)		
- Paul D. Camp	- Manassas ('84)		
- Southside	- Rappahannock		
- Tidewater	- Virginia Highlands		
	- Wytheville		

Table 2

ARTICULATION PROGRAM SUMMARY

(as of June 30, 1985)

Programs to be Articulated / Service Region	Accounting	Auto Mech	Bus Mgt	BusEd SecSc	Comp Aided Design	Data Proc	Drafting	Elec/ Electr	Eng Tech	Forestry	Mach Shop	Nursing Health Occ	Trade & Indus	Welding
Blue Ridge	X	U		U			X	U				A		
Central Virginia		A				U	A	A			A			
Dabney Lancaster				A		U	A	U		U		U		
Danville		U		A		U								
Eastern Shore				A										
Germanna		U		U										
J. Sargeant Reynolds														
John Tyler				U				U	U					
Lord Fairfax				A		A								
Mountain Empire				X										
New River				A			A							
Northern Virginia		X				X						X		X
Patrick Henry				U		U								
Paul D. Camp			X				X	X						
Piedmont Virginia					X									X
Rappahannock	A			A										
Southside Virginia		A		A				A						
Southwest Virginia				A		X		A			A			A
Thomas Nelson				A			A				A			
Tidewater				X										
Virginia Highlands				U			A	U				U		
Virginia Western		A		A								U		
Wytheville				A			A				A			

A - Articulation agreement established X - Involved in articulation of these programs U - Programs under consideration for future articulation

The participants also identified ways in which the students and faculty might benefit from articulation. The principal student-related benefits were, "Motivate students to do better quality work" and "Attract better quality students to the program". The highest scored faculty-related benefits included, "Improve communications and cooperation between community college and public school personnel" and "Increased enrollment in my courses and programs". Forty-seven percent of the responding high school instructors indicated articulation would cause them to evaluate their students more closely.

Accomplishments:

The project resulted in the completion of a variety of activities. The specific activities are listed in a previous section of this report. The overall accomplishments of the project are listed below:

1. Awarded 15 of 20 "mini projects" submitted for a total of $27,000 (Appendix M).

2. Printed and distributed Articulation of Vocational Programs - Secondary/ Postsecondary Handbook to all secondary schools and community colleges in Virginia.

3. Developed and distributed secondary/postsecondary vocational program grids for the 23 community college service regions (sample Appendix I).

4. Conducted 25 articulation workshops, presentations and seminars.

5. Conducted articulation evaluation survey on the 15 "mini projects" involved in the project this year (Articulation Survey Summary - Appendix L).

6. Conducted two advisory committee meetings, one subcommittee meeting and two funding review panel meetings.

7. Developed status report on articulation throughout the state (Appendix J).

8. Developed nine articulation agreements in nine community college service regions.

9. Developed six articulation plans in five community college service regions.

10. Developed and will submit the final report for the Vocational Education Articulation Project.

11. At this time all 23 community college service regions are involved in the development of some stage of an articulation agreement.

Recommendations for Future Activities:

The project advisory committee met on May 17, 1985, and reviewed the activities of this year's project. The following are recommendations for future articulation activities to be conducted by the State Department of Education and the Virginia Community College System.

1. The State Department of Education and the Virginia Community College System should continue to support a state-wide effort to coordinate the articulation of vocational programs. This support should take the following form:

a) 1985-86 The State Department of Education and the Virginia Community College System should each designate state and local level individuals to be responsible for overseeing articulation activities in their respective systems, public schools and community colleges. It is recommended that local level designees should be the directors of vocational education and deans of instruction.

b) 1986-87 The State Department of Education and the Virginia Community College System should consider the re-establishment of a state-wide coordinator of articulation.

2. 1985-86 "Mini projects" of $1000 to $1500 each should be established to allow service regions to continue their efforts to develop and/or expand articulation. "Mini project" participants should be strongly encouraged to inform and involve service region business and industry representatives in their articulation activities. These projects may provide funds to support articulation activities to accomplish any of the following:

   a) Development of articulation agreements.

   b) Expansion of current articulation agreements into new program areas.

   c) Identification and development of marketing strategies for potentially articulated program networks that may involve the public school systems, community colleges and four year colleges and universities.

3. The articulation advisory committee should be continued with funds set aside to support meals and travel for its membership to provide guidance and direction for the State Department of Education representative who will work with "mini projects" during 1984-85.

4. The articulation advisory committee should also be available to assist the State Board of Education, State Board of Community Colleges and the State Council of Higher Education in the development of state-wide articulation policy.

APPENDICES

APPENDIX A

Advisory Committee
for
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APPENDIX B

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  Asst. Vice Chancellor
  for Instructional Programs
  & Student Services
  Virginia Community College System
  P. O. Box 1558
  Richmond, VA 23212
  Phone: (804) 225-2653
  SCATS 335-2653

- Mr. Cecil G. Phillips
  Thomas Nelson Community College
  P. O. Box 9407
  Hampton, VA 23670
  Phone: (804) 825-2700
  SCATS 564-2901

- Dr. Donald Puyear
  Deputy Chancellor, Virginia
  Community College System
  P. O. Box 1558
  Richmond, VA 23212
  Phone: (804) 225-2653
  SCATS 335-2653

- Mr. William B. Rasnick
  Director, Vocational Education
  Tazewell Public Schools
  P. O. Box 469
  Tazewell, VA 24651
  Phone: (703) 988-5511

- Dr. Ned Swartz
  Supervisor, Vocational Research
  Coordinating Unit
  Department of Education
  P. O. Box 6Q
  Richmond, VA 23216
  Phone: (804) 224-2100
  SCATS 335-2100

- Dr. Harold VanHook
  Dean of Instruction
  Southwest Virginia Community College
  P. O. Box SVCC
  Richlands, VA 24661
  Phone: (703) 964-2555
  SCATS 676-3864

Project Staff:

- E. Lynn Suydam
  Project Director
  Virginia Tech
  Room 334 Lane Hall
  Blacksburg, VA 24061
  Phone: (703) 961-5812
  SCATS 230-5812

- Secretary
  Mrs. Betty Moore

Minutes
Advisory Committee Subcommittee
James Monroe Building
Richmond, Virginia
September 10, 1984

Attending: Dr. Roger Beeker, Mr. Richard Carter, Mr. Paul L. Cummings, Dr. Joseph Ford, Dr. Donald Puyear, Mr. William B. Rasnick, Dr. Harold Van Hook, Mr. Lynn Suydam

Absent: Mr. Cecil Phillips, Dr. Ned Swartz

Introduction:

The purpose of this meeting was to identify problem areas in which action at the state level might better facilitate the development of articulation agreements at the local level. The members of the committee were introduced. Then Mr. Suydam provided a brief review of the State Department of Education's efforts to support and promote the articulation of vocational programs in Virginia.

Identification of Problems:

The committee discussed and identified problems they had encountered in developing articulation agreements. The list of problems was extensive and included difficulties in the areas of curriculum, administration, personnel and student services. A summary of the problems identified is as follows:

Curriculum

1. Lack of common curriculum in similar program areas in secondary and community college instructional programs.
2. The differences in secondary vocational programs from one high school to another within a given community college service region.
3. Lack of competency-based curriculum at the community college level.
4. Lack of availability of competency-based curriculum material developed by the state for use in its vocational programs to community college instructors.

Administration

1. Need to obtain support of the community college president and public school superintendents in order to be successful in developing an articulation agreement.
2. Lack of understanding of competency records and availability of competency records in community colleges.

3. Poor maintenance and transmission of competency records between secondary schools and community colleges.
4. Availability of training equipment necessary to conduct the education program.
5. Development of a common understanding at both the state and local levels of the definition and direction for articulation of secondary and community college vocational education.
6. Awarding partial credit at the community college for work completed at the secondary level.
7. Lack of resources to sustain the continual need for maintenance and updating of the articulation agreements.
8. Lack of a communication network to keep abreast of the subject areas and programs in which articulation between the secondary schools and community colleges is possible.

Personnel

1. Developing trust and mutual respect among the secondary and community college faculty.
2. Lack of knowledge of both secondary and community college instructors about the content, goals, objectives and expectations of the other's programs.
3. Ineffective and inefficient instructors at both the secondary and community college levels.
4. Lack of resources to address the need for development and technical updating of secondary and community college faculty.
5. Developing unrealistic expectations for the development of an articulation agreement.

Student Services

1. Lack of information to and involvement of the counselors and admissions personnel in the articulation process.
2. Lack of information provided parents, the community and area businesses on the benefits of articulation currently occurring between the secondary schools and community colleges in Virginia.
3. Lack of sufficient and correct student advisement on articulation.

This list of problems was not intended to be comprehensive or complete. Rather, it was intended to promote thinking on the problems that do occur during the development of an articulation agreement, and result in some suggestions on how the State Department of Education and the Virginia Community College System might continue their support of articulation and better facilitate local efforts to develop articulation agreements. Solutions to most of the problem areas identified above can only be developed at the local level and involvement of state level personnel would only complicate the situation. However, as a result of these discussions, the following suggestions are made to the State Department of Education and the Virginia Community College System to better facilitate the articulation of vocational programs.

Suggestions: (These three suggestions are to be forwarded to the State Department of Education and the Virginia Community College System.)

1. Continue to include the articulation of secondary and community college vocational programs as an objective of the state plan for vocational education for both agencies.

2. Develop a mechanism by which community college instructors may obtain competency-based instructional materials developed for vocational programs in Virginia.

3. Continue to provide financial resources that will enable local personnel to maintain and update articulation agreements.

Suggested solutions to other problems identified included:

1. Solutions to providing credit and modifying curriculum to facilitate articulation and advanced placement should be locally developed and are best dealt with at the local level.

2. To develop trust and mutual respect among faculty, joint faculty development programs are useful.

3. To improve communication and understanding of articulation within a school system or community college, include as a representative on the general advisory council an individual responsible for articulation.

4. To improve the problems associated with student services and admissions, involve student services personnel at all levels of the development and implementation of the articulation agreement.

5. To insure the inclusion of an objective in the state plan for vocational education on articulation, be sure to include objectives on the articulation of vocational programs in the local plans for vocational education of the community college and all secondary schools in each community college service region.

This represents a summary of the problems identified and the suggested strategies developed by the subcommittee to address these problems. These suggestions indicated above for the State Department of Education and the Virginia Community College System will be forwarded to Dr. Donald Puyear, Deputy Chancellor, and Mr. Dewey Oakley, Director of Program Services, for their information and consideration for future action.

Respectfully submitted,

E. Lynn Suydam

APPENDIX C

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

MEMORANDUM

TO: Community College Presidents
School Division Superintendents

FROM: E. Lynn Suydam, Project Director
Vocational Education Articulation Project

SUBJECT: Soliciting requests for "mini project" funding to assist in the development of formal articulation agreements for vocational programs.

DATE: July 11, 1984

Virginia Tech has received funding again this year for the Vocational Education Articulation Project. The purpose of this project is to promote and assist in the development of formal articulation agreements in vocational programs. A number of "mini projects" have been established as part of the Articulation Project in order to provide support for the development of articulation agreements. These "mini projects" are available on a one per community college service region basis. The "mini project" requests may be submitted by either a public school division or the community college of a service region, and the projects should be joint efforts of the school divisions and the community college of a service region to develop formal articulation agreements for their vocational programs.

Attached is a "mini project" request form. Two levels of funding are available, Level One, $1500, and Level Two, $3000. The eligibility requirements for Level One and Level Two funding are as follows:

Level One ($1500) - For those service regions which do not have an articulation plan approved by the school division superintendents and the community college president. Level One funding is to be used to support administrative meetings, mileage and meals necessary to develop an articulation plan. More specific information is provided in the request form.

Level Two ($3000) - For those service regions that have an approved articulation plan signed by school division superintendents and the community college president. Level Two funding is to be used to support faculty and program administrator meetings, substitute or faculty release time and meals necessary to develop articulation plans. Level Two projects may involve four year institutions if articulation with the four year institutions represents a continuation of the articulation agreements established between secondary and community college programs. Please submit the approved articulation plan for your service region as part of your request.

The Vocational Education Articulation Project welcomes the submission of "mini project" requests from all community college service regions. Requests must be submitted no later than August 10, 1984. Every attempt will be made to fund all properly prepared requests. However, in the event insufficient monies are available to fund all requests, projects will be selected for funding based on the following criteria:

1. Request is submitted on time.

2. Request addresses the funding objective.

3. Request is clearly and concisely stated and addresses each of the areas of the request form.

4. Request involves the community college and all school divisions of the service region.

In addition to the "mini project" funds, inservice programs and technical assistance are available from the project to assist in the development of articulation plans and agreements. For further information contact Lynn Suydam at (703) 961-5812.

ELS/ebm

Enclosure

cc: Deans of Instruction
Provosts
Directors of Vocational Education
Principals of Joint Vocational Centers

"MINI PROJECT" REQUEST FORM

Issued to: Local community colleges of the Virginia Community College System, local school divisions

Type of Funding: Funds to support the development of approved articulation plans and/or approved articulation agreements

Title of Project: Vocational Education Articulation Project

Project Number: VA-83-C-131-2-AD-001

Activity Goal: To develop approved articulation plans and articulation agreements between community college and secondary school vocational programs. Four year colleges and universities may be involved if articulation with these institutions represents a continuation of the articulation agreements at the secondary and community college level.

Rationale: The interest in and the need for vocational education is expanding in Virginia. In order to maximize the opportunities for vocational education to the student and to facilitate the student's smooth transition from one vocational program or institution to another, there is a need to establish formal articulation agreements. These funds are provided to aid community college and local school personnel in the development of approved articulation plans and agreements.

Objective: To provide funds which may be used to support community college and local school personnel in the development of articulation plans and/or articulation agreements.

Funding Request Format: (Form attached)

Introduction - Explanation of the college and its service region's interest and efforts toward the development of articulation agreements to date.

Purpose - Describe what is to be accomplished and what school systems will be involved in the project. (The approved articulation plan should serve as the nucleus of the request for those regions requesting Level Two funding.)

Objectives - List the objectives to be accomplished. (Approved articulation plan should serve as the nucleus of Level Two requests.)

Plan - Identify the administrators and their school systems that will participate in the development of

the articulation plans and provide a schedule of activities. (Approved articulation plan should serve as the nucleus of Level Two requests.)

Budget - Funds may be used to support any activities that contribute to the development of approved articulation plans. These expenses may include travel, meal functions, etc. However, reimbursement of expenses will only occur upon submission of approved articulation plans.

Deliverables: The product to be delivered is a summary of activities and an approved articulation plan or articulation agreement signed by all participating superintendents and the community college president. An approved articulation plan or agreement must be submitted prior to being reimbursed for development activities.

Time Frame: The project period will be fiscal year ending June 30, 1985. Projects should be completed by May 1, 1985, to allow for the submittal of final requisitions for reimbursement no later than June 30, 1985.

Funds Available: Level One ($1500) - For those service regions which do not have an approved articulation plan signed by school division superintendents and the community college president. These monies may be used to assist in the development of an approved articulation plan. Expenses which can be included may consist of the following:

- Meal functions and refreshements
- Travel
- Stipends for faculty which may be involved in developing the articulation plan
- Mailing, copying

Service regions requesting Level One funding may wish to complete the development of their approved plans prior to December 15, 1984. If approved plans are submitted to the project director prior to December 15, 1984, and funds are available, a second request for Level Two funding may be submitted to assist in the development of formal articulation agreements.

Level Two ($3000) - For those service regions which have approved articulation plans signed by school division superintendents and the community college president. These monies are to be used to implement the articulation plan and develop formal articulation agreements. Expenses which can be included may consist of the following:

Meal functions and/or refreshemnts
Stipends for faculty release time or substitute salaries to allow faculty to work on development of articulation agreements
Travel
Mailing, copying

A copy of the approved articulation plan must be submitted with Level Two requests.

Submission Deadline: Requests should be submitted no later than 5 p.m., August 10, 1984.

Submit Proposals to: E. Lynn Suydam
Vocational & Technical Education
334 Lane Hall
Virginia Tech
Blacksburg, VA 24061

Inservice activities concerning articulation, the development of articulation plans and articulation agreements, and the role of CBE in articulation are available through the Vocational Education Articulation Project.* Questions pertaining to the funding requests or other services should be directed to E. Lynn Suydam at (703) 961-5812.

Four copies of this request must be submitted to the above address. Each copy must bear the original signatures of the officials authorized to sign the proposal.

*These are provided at no expense to the requestor.

"Mini Project" Request Form

Institution: _____

Address: _____ Phone: _____

_____

_____

Project Head: (Name) _____ Phone: _____

(Title) _____

Introduction:

Purpose:

List of School Divisions, Community College and Administrators Involved:

Objective:

Schedule of Activities: (Use additional sheets if necess. ry.)

Date (approximate) Activity

Project Budget: (Use additional sheets if necessary.)

Indicate below the names, titles and signatures of those who are authorized to negotiate requests for funding and approve reimbursement applications:

Signature _____ Title _____

(Name) _____

Signature _____ Title _____

(Name) _____

APPENDIX D

Funding Request Review Panel Meeting
for
Vocational Education Articulation Project

Committee Members:

- Donald K. Baker
  Educational Programs Coordinator
  Virginia Community College System
  P. O. Box 1558
  Richmond, VA 23212
  Phone: (804) 225-2124
  SCATS 335-2124

- Linda L. Carr
  Planning Coordinator
  Virginia Community College System
  Planning & Evaluation Division
  P. O. Box 1558
  Richmond, VA 23212
  Phone: (804) 225-2127
  SCATS 335-2127

- M. Carter Murphy
  Director, Adult & Vocational Education
  Petersburg Public Schools
  141 E. Wythe Street
  Petersburg, VA 23803
  Phone: (804) 732-0510

- Ned K. Swartz
  Supervisor, Vocational Research Coordinating Unit
  Virginia Department of Education
  P. O. Box 6Q
  Richmond, VA 23216
  Phone: (804) 224-2100
  SCATS 335-2100

Alternate:

- Lois Wells
  Educ. Programs Coord.
  Va. Comm. Col. System
  P. O. Box 1558
  Richmond, VA 23212
  Phone: (804) 225-2291
  SCATS 335-2291

Project Staff:

- E. Lynn Suydam
  Project Director
  Virginia Tech
  Room 356 Lane Hall
  Blacksburg, VA 24061
  Phone: (703) 961-5812
  SCATS 230-5812

- Secretary
  Mrs. Betty Moore

APPENDIX E

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

August 24, 1984

Dr. Ned Swartz
Supervisor, Vocational Research
Coordinating Unit
Department of Education
P. O. Box 6Q
Richmond, VA 23216

Dear Ned:

This letter is to request an additional $22,745 from the State Department of Education in order to fund all "mini projects" submitted to the Vocational Education Articulation Project.

The "mini project" requests this year totaled $48,256. This amount is in excess of the amount available for this purpose. The Funding Request Review Panel has met and reviewed this year's requests, and the Panel's first recommendation was to request the additional funds necessary to fund all the requests submitted. Enclosed in support of this request are the recommendations of the Funding Request Review Panel of the Vocational Education Articulation Project.

Thank you for your consideration of this request. If you require additional information, please contact me.

Sincerely,

E. Lynn Suydam
Project Director

ELS/ebm

Enclosure

Recommendations
of
Funding Request Review Panel

The Funding Request Review Panel of the Vocational Education Articulation Project met Friday, August 17, 1984, in Richmond. The panel reviewed the requests for "mini projects" submitted this year. The amount requested exceeded the amount budgeted for this purpose. A summary of the 20 requests is attached.

The panel's recommendations are summarized below and a rationale is provided where necessary:

Recommendation 1

Request the additional funds necessary to fund all the requests from the State Department of Education.

The Panel indicated that all 20 of the requests were well-written and worthy of funding. Articulation of vocational programs is a priority of the State Department of Education, and the goal of the project is to promote and support efforts to articulate vocational programs all over the state. Therefore, it is in keeping with the goal of the State Department and the project to provide assistance to those public schools and community colleges interested in pursuing the development of articulation agreements.

A precedent exists for requesting additional funds in support of articulation "mini projects". This panel requested and received an additional $5,212 to fund the "mini project" requests last year. As a result of last year's support, the level of involvement in articulation increased from 13% to 83% of the community college service regions. Included among this year's requests are "mini projects" from three of the four community college service regions not yet involved in articulation.

Recommendation 2

If additional funds are not available to fund "mini project" requests, fund "mini projects" in accordance with the priorities established by the panel. These priorities are listed below:

a. First priority - Fund all first time "mini project" requests.

One modification was made to this priority. Two campuses of Northern Virginia Community College, Alexandria and Woodbridge, submitted first time requests for funding and because they were two campuses of the same college, each request was reduced by $500. This reduced their total request to $2,000.

b. Second priority - Fund projects that have not received funding for articulation from the State Department of Education on more than two prior occasions.

The public schools and community colleges of five community college service regions participated in grants awarded by the State Department of Education during 1979 to 1982. These service regions will be provided only one year of additional funding through this project.

c. Third priority - Fund all second year "mini project" requests with a rating score above 80.

Each project was scored on a twenty point scale by the five members of the committee and these scores were added together to arrive at a final score. Those projects with scores of 80 or below will not be funded, and those projects with scores of 81 or above will be reduced by 26% if additional funds are not provided. One exception was made. Eastern Shore Community College service region requested only $586 for its second year of funding.

Also sent to project directors at:

APPENDIX F

NVCC (ALEXANDRIA CAMPUS)
NVCC (WOODBRIDGE CAMPUS)
DANVILLE CC
LORD FAIRFAX CC
NEW RIVER CC
RAPPAHANNOCK CC
SOUTHSIDE VA CC
VA HIGHLANDS CC
WYTHEVILLE CC

VIRGINIA POLYTECHNIC INSTITUTE

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

September 19, 1984

NOTE: Grant amounts vary - see request summary for amounts for each school

Dr. Jerry Hardy
Dir. of Vocational & Adult Education
Roanoke County Schools
526 College Avenue
Salem, Virginia 24153

Dear Dr. Hardy:

This is to inform you that your request for funds to support the development of an articulation agreement has been reviewed by the Funding Request Review Panel of the Vocational Education Articulation Project and the Virginia Western Community College Service Region has been awarded $2,323. Your original request for $2,988 had to be reduced to the amount indicated because insufficient funds were available to fund all the proposals submitted. Adjustments were made in funding levels to provide monies to assist as many service regions as possible in the development of articulation agreements. A copy of your proposal is attached and copies will also be on file with the Virginia Tech Office of Grants and Contracts and the State Department of Education. This letter does not represent an official contract, however, I would like to congratulate you on your being awarded these funds.

You may expect to receive an official contract in the mail shortly. The contract will be sent to you by the Virginia Tech Office of Grants and contracts, and you will need to sign and return it to the address indicated on that document. Accompanying the contract will be instructions on how to submit your reimbursement request. These instructions will require you to submit your approved articulation agreement to me with your request for reimbursement on or before May 1, 1985. If you have fulfilled your agreement described in the funding request, your reimbursement will be processed. You should receive your reimbursement prior to June 30, 1985.

Your interest in the articulation of vocational programs is appreciated. I am available to provide assistance in the way of orientation and inservice seminars, and I will be in contact with you shortly. If you have questions or need assistance, contact me at (703) 961-5812.

Sincerely,

E. Lynn Suydam
Project Director

ELS/ebm

Enclosur

Also sent to project directors at:

BLUE RIDGE CC
JOHN TYLER CC
PAUL D. CAMP CC ($1487)
EASTERN SHORE CC

VIRGINIA POLYTECHNIC

DIVISION OF VOCATIONAL & TECHNICAL EDI

September 19, 1984

Dr. Benjamin T. King
Dean of Instruction &
Student Services
Dabney S. Lancaster Com. College
Route 60 West
Clifton Forge, VA 24422

Dear Dr. King:

This is to inform you that your request for funds to support the development of an articulation plan has been reviewed by the Funding Request Review Panel of the Vocational Education Articulation Project and the Dabney S. Lancaster Community College Service Region has been awarded the $1,500 it requested. A copy of your proposal is attached and copies will also be on file with the Virginia Tech Office of Grants and Contracts and the State Department of Education. This letter does not represent an official contract, however, I would like to congratulate you on your being awarded these funds.

You may expect to receive an official contract in the mail shortly. The contract will be sent to you by the Virginia Tech Office of Grants and Contracts, and you will need to sign and return it to the address indicated on that document. Accompanying the contract will be instructions on how to submit your reimbursement request. These instructions will require you to submit your approved articulation plan to me with your request for reimbursement on or before May 1, 1985. If you have fulfilled your agreement described in the funding request, your reimbursement will be processed. You should receive your reimbursement prior to June 30, 1985.

Your interest in the articulation of vocational programs is appreciated. I am available to provide assistance in the way of orientation and inservice seminars, and I will be in contact with you shortly. If you have questions or need assistance, contact me at (703) 961-5812.

Sincerely,

Lynn Suydam

E. Lynn Suydam
Project Director

ELS/ebm

Enclosure

Also sent to project directors at:

CENTRAL VA. CC
GERMANNA CC
NVCC (ANNANDALE CAMPUS)
NVCC (MANASSAS CAMPUS)

VIRGINIA POLYTECHNIC

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

September 19, 1984

Dr. John R. Cox
Business Division Chairman
Southwest Virginia Community College
Richlands, VA 24641

Dear Dr. Cox:

This is to inform you that your request for funds to support the development of an articulation agreement has been reviewed by the Funding Request Review Panel of the Vocational Education Articulation Project. The decision of the panel was a difficult one because of the large number of projects submitted, however, the proposal from Southwest Virginia Community College Service Region was not awarded funding. A copy of your proposal is enclosed.

The number of projects submitted was large and the total amount requested exceeded the funds available. Selection of the proposals to be awarded funds was difficult because the quality of the proposals was good. However, the panel rated the proposals on the basis of the criteria indicated in the request for "mini project" funding, and the highest rated projects received funding.

Your interest in developing a secondary/community college articulation agreement is appreciated. I hope you will continue with the development of the articulation agreement for your service region. If I can provide technical assistance to aid you in developing your agreement, I will be happy to do so. Any assistance I provide will be at no expense to you. If you have questions or wish assistance, please contact me at (703) 961-5812.

Sincerely,

Lynn

E. Lynn Suydam
Project Director

ELS/ebm

Enclosure

APPENDIX G

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

MEMORANDUM

TO: Mini Project Heads

FROM: E. Lynn Suydam
Project Director

SUBJECT: Submission of Final Mini Project Reports

DATE: March 22, 1985

Questions have been raised concerning the date and format of the submission of the final mini project reports. This memorandum will provide information that will assist you with the submission of these reports.

The Mini Project Request Form indicated the following concerning the submission of the final report:

Deliverables: The product to be delivered is a summary of activities and an approved articulation plan or articulation agreement signed by all participating superintendents and the community college president. An approved articulation plan or agreement must be submitted prior to being reimbursed for development activities.

Time Frame: The project will be the fiscal year ending June 30, 1985. Projects should be completed by May 1, 1985, to allow for the sumbittal of final requisitions for reimbursement no later than June 30, 1985.

Therefore, Mini Project Final Reports are to be submitted to the Project Director postmarked no later than May 1, 1985, in order to be considered for reimbursement. If your service region was involved throughout the year in attempts to develop an articulation plan or agreement and was not successful, you will need to submit information indicating and supporting the efforts that were made in attempting to complete your proposal objectives. All well founded attempts at accomplishing the proposal objectives will be looked upon favorably by the Funding Review Panel in recommending reimbursement.

Mini Project Final Reports must be postmarked no later than May 1, 1985, and all materials submitted to the address indicated below. The final report should contain the following sections and a sample report is attached for your use as a guideline.

Project Goals and Objectives - List of the goals and objectives of your initial proposal.

Program Areas - Include list of the program areas and the participating schools and/or school systems for the articulation agreements or plans developed. Attach copies of articulation plans or agreements developed. Suggested formats for articulation plans and/or agreements are included in the Articulation of Vocational Programs - Secondary/Postsecondary Handbook, pages 34-37 and 50-61, respectively.

Summary of Activities - Include a list of meeting dates and topics, and attach a copy of the meeting agenda, a summary of the minutes and a list of those attending.

Reimbursement Information - This information should be submitted using the format in the attached example. Please submit all final report materials to:

Dr. E. Lynn Suydam
Virginia Tech
Vocational & Technical Education
334 Lane Hall
Blacksburg, VA 24061

As indicated above, the attached is a sample final report. You may structure your report like that of the sample or use another format more to your liking. The reimbursement section is the only section which must be followed.

If you have questions concerning the submission of these reports, contact me at (703) 961-5812.

ELS/ebm

Enclosures

S A M P L E

_____ COMMUNITY COLLEGE SERVICE REGION

Final Project Report

This final report presents a summary of the activities and accomplishments toward the articulation of vocational programs of the representatives of the public school systems and the community college with the _____ Community College Service Region. The articulation plan (or agreement) included in this report was developed with the assistance of the funds provided by the Articulation of Vocational Programs Project, and this report is a summary of the activities, products and costs associated with this project.

This report is submitted by:

Project Head: _____

Address: _____

_____

_____

Phone #: ( ) _____

Project Objectives: (The information below is an example. Use your own objectives.)

1. *To develop a written articulation plan (agreement) for the _____ Community College Service Region that will be approved and signed by the superintendents and community college president of the service region.*

2. *To develop specific curricula. . ., etc.*

Program Areas and Participating School Systems* (Information below is an example.)

Secretarial Science/Business Education:

Virginia Western Community College
Roanoke City Schools
Roanoke County
Salem Schools

Drafting:

Virginia Western Community College
Roanoke County
Salem Schools
Botetourt County

etc.

**Only those school systems within the service region with high schools having the programs and participating in the agreement (plan) are listed.*

S A M P L E

A copy of the articulation plan (agreement) developed for this service region is attached.

Summary of Activities: (Information below is an example.)

The activities listed below were conducted in order to fulfill the objectives of this project. Minutes, attendance and a summary of other activities conducted are attached.

November 15, 1984 - Articulation Steering Committee - Initial orientation meeting.

December 12, 1984 - Superintendents and presidents designated program areas to articulate.

January 30, 1985 - Steering Committee work session.

etc.

Reimbursement Information: (This section contains instructions on how to complete the reimbursement information.)

The following two pages summarize what is necessary for submission for reimbursement of your expenses.

DA-02-039 (COMP 5A) REV. 8-82
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ACCOUNTS

SAMPLE

BEST COPY AVAILABLE

INTERAGENCY TRANSFER INVOICE

SUPPLIED BY. CREDIT		SUPPLIED TO CHARGE	
AGENCY (Name and Address of Community College)	CODE (2)	AGENCY Virginia Polytechnic Institute and State University	CODE 230
ADDRESS (1)		ADDRESS Office of Sponsored Programs 301 Burruss Hall	
INVOICE NUMBER	DATE (MM/DD/YY) (3)	SHIPPED TO Blacksburg, VA 24061	
TION NUMBER		AGENCY REFERENCE NO	

NOTE:

SECTION 9 OF THE COMMONWEALTH OF VIRGINIA ACCOUNTING POLICIES AND PROCEDURES MANUAL LISTS TRANSACTION CODES AUTHORIZED FOR USE ON THIS DOCUMENT.

ATE OF ELIVERY R SERVICE	DESCRIPTION OF ARTICLES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
8/1/84 through 6/30/85	To transfer funds for costs incurred in accordance with Sub-contract No. (4)				(5)

TO THE COMPTROLLER: IT IS HEREBY CERTIFIED THAT THE GOODS OR SERVICES SPECIFIED ABOVE HAVE BEEN RECEIVED OR PERFORMED. PAYMENT THEREON HAS NOT BEEN PREVIOUSLY AUTHORIZED AND THAT THIS EXPENDITURE IS A PROPER CHARGE TO THE APPROPRIATION INDICATED. THIS ACCOUNT IS APPROVED FOR PAYMENT. UNIT PRICES AGREE WITH PURCHASE ORDER.

SIGNATURE OF APPROVING OFFICER (USE INK)

PRINT NAME

TITLE

VOUCHER NUMBER | DATE (MM-DD-YY)

TOTAL THIS SHEET	(5)
TOTAL SHEET 2	
TOTAL SHEET 3	
TOTAL SHEET 4	
AMOUNT CERTIFIED FOR PAYMENT	(5)

☐ CHECK IF EXPENDITURE DISTRIBUTION CONTINUATION SHEETS, FORM DA-02-039 A, ARE ATTACHED.

(6)

TRANSFER DISTRIBUTION

TRAN	AGENCY	COST	FUND / DETAIL	PROGRAM PROG	SUB	ELE	OBJECT	REVENUE	AMOUNT	PROJECT	INVOICE NUMBER	AGENCY USE	✓ IF COMPLETE PURCHASE ORDER NO	DOA
136									(5)					
380	230		11	110			4134		(5)	085		848190-3		
	4													48

BEST COPY AVAILABLE

Complete IAT as indicated in the attached sample and also the following information:

1. Name and address of your community college
2. Your agency code
3. The date of the transfer
4. Your four digit contract number (listed as "sub-contract No." on the purchase order)
5. The amount of the invoice
6. Your appropriate agency, fund, detail, revenue, etc. codes for crediting your institution

Also attach a summary of expenditures itemized as follows (as they pertain to your expenditures):

Salaries and Wages	$_____
Fringe Benefits	_____
Communications (phone, postage, etc.)	_____
Supplies and Materials	_____
Printing & Copying	_____
Travel (meals, mileage, & conference expenses,etc.)	_____
Total	$_____

and certify with the following statement:

> "I certify that this invoice is for costs actually incurred in the performance of contract No. 848190-3 and that said costs are reimbursable under the provisions of Federal Procurement Regulation Section XV, Part 2 (Part 3, if contractor is an educational institution)."

(PLEASE NOTE: The above certification must be signed by an authorized representative of your institution.)

Return the IAT to: E. Lynn Suydam
Project Director
Virginia Polytechnic Institute
and State University
Room 334, Lane Hall
Blacksburg, Va. 24061

If you have questions regarding the preparation of the above, please contact Deborah Strawn at (703) 961-5013.

APPENDIX H

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

May 20, 1985

Dr. Ned K. Swartz
Supervisor, Vocational Research
Coordinating Unit
Department of Education
P. O. Box 6Q
Richmond, VA 23216

Dear Ned:

Enclosed are the minutes of the Funding Review Panel meeting. All project IAT's have been submitted to the Contracts and Grants Office of Virginia Tech for reimbursement.

Thank you for your service on the Funding Review Panel. This panel has provided excellent assistance over the past two years in accomplishing the tasks of reviewing and recommending for funding of the initial "mini projects" and providing the recommendations for reimbursement of the final project reports. I am grateful for your assistance in accomplishing these activities.

If you have questions concerning these minutes, please contact me at (703) 961-5812. Thanks again for your help and I look forward to working with you again sometime in the future.

Sincerely,

Lynn

E. Lynn Suydam
Project Director

ELS/ebm

Enclosure

Minutes

Funding Request Review Panel
Meeting
May 7, 1985

Attending: Linda Carr, Lois Wells, Ned Swartz, Carter Murphy, Lynn Suydam

The committee reviewed 12 of the 15 projects submitted for reimbursement of expenses incurred during the project year. All 12 project reports reviewed were recommended for reimbursement of their expenditures. The committee further recommended that the project director submit for reimbursment the three projects not available for their review if after the project director's review, they met all requirements.

A summary of the projects submitted for reimbursement is as follows:

Articulation Plans

Blue Ridge	616.70
Dabney S. Lancaster	989.53
John Tyler	245.15
*Northern Virginia (Alexandria campus)	----
Northern Virginia (Woodbridge campus)	930.00
*Paul D. Camp	----
Subtotal	2,781.40

Articulation Agreements

Danville	1,683.67
Eastern Shore	253.50
Lord Fairfax	2,107.14
New River	1,951.04
Rappahannock	2,401.44
Roanoke County Schools	2,323.00
Southside Virginia	598.60
Virginia Highlands	395.15
Wytheville	832.31
Subtotal	$12,545.85
Total Requested for Reimbursement	$15,327.25

*Submitted only progress reports and did not request reimbursement for expenses.

1984-85
"Mini Project" Request Summary

The award period for all proposals listed below is from August 1, 1984, to June 30, 1985. Submission deadline for articulation plans and agreements to the Project Director is May 1, 1985.

Subcontr. #	Service Region	Amount Awarded	Amount Expended
4134	Blue Ridge Community College	$ 1,500.00	$ 616.70
4135	Dabney S. Lancaster Com. College	1,500.00	989.55
4136	John Tyler Community College	1,500.00	245.15
4137	No. Va. Community College (Alexandria)	1,000.00	----
4138	No. Va. Community College (Woodbridge)	1,000.00	930.00
4139	Paul D. Camp Community College	1,487.00	----
	Subtotal	$ 7,987.00	$ 2,781.40
4140	Danville Community College	2,129.00	1,683.67
4141	Eastern Shore Community College	586.00	253.50
4142	Lord Fairfax Community College	2,310.00	2,107.14
4143	New River Community College	2,333.00	1,951.04
4144	Rappahannock Community College	2,333.00	2,401.44
4145	Roanoke County Schools (Va. West. SR)	2,323.00	2,323.00
4146	Southside Virginia Community College	2,333.00	598.60
4147	Virginia Highlands Community College	2,333.00	395.15
4148	Wytheville Community College	2,333.00	832.31
	Subtotal	$19,013.00	$12,545.85
	TOTAL	$27,000.00	$15,327.25

APPENDIX I

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL-TECHNICAL EDUCATION

MEMORANDUM

TO: Dr. Ned Swartz

FROM: E. Lynn Suydam
Project Director

SUBJECT: Summary of secondary/postsecondary articulation activities

DATE: March 6, 1985

The attached is a summary of the articulation activities within the 23 community college service regions of Virginia. The information includes a brief summary and list of recommendations for future activities in articulation tables summarizing the particular phase of articulation and the programs being articulated for each service region and a brief description of the articulation activities for each service region.

Virginia's efforts in vocational program articulation are successful, and vocational education across the state is beginning to benefit. In addition, Virginia is developing a reputation across the country for being progressive and aggressive in vocational program articulation. I have received requests for information on the Virginia model for articulation from Indiana, Utah, Missouri, West Virginia, the National Center for Research in Vocational Education and the National Association of Community/Junior Colleges. In addition, Gene Bottoms, Executive Director of the American Vocational Association, has indicated that Virginia's efforts in secondary/postsecondary articulation are currently among the best in the United States, and he has recommended that those seeking information on articulation should contact Virginia. Hopefully, the state will be able to continue to support efforts to promote and develop articulation in vocational education.

I hope you find this information useful in determining the progress made to date in the area of secondary/postsecondary vocational program articulation and in considering directions for continued and expanded efforts in this area.

ELS/ebm

Enclosures

cc: Dr. Melvin H. Garner
Mr. Dewey T. Oakley, Jr.
Dr. Donald E. Puyear

ARTICULATION SUMMARY AND RECOMMENDATIONS FOR FUTURE ACTIVITIES

Ninety percent of the state's community colleges and public schools are currently involved in some phase of the development of an articulation agreement. The attached table summarizes the articulation activities of the 23 community college service regions in Virginia. Table 1 indicates that nine college and one campus service regions have or are in the process of developing articulation plans; eight college and three campus service regions are in the process of developing articulation agreements; three service regions have developed, implemented and updated articulation agreements; and two college and one campus service regions do not have formal articulation plans or agreements under development among the school systems in their service regions. However, Piedmont Virginia Community College is currently developing articulation agreements with the Charlottesville-Albemarle Vocational-Technical Center in its service region. The summary sheets following the table provide additional information on the articulation activities and list the school systems and jointly operated vocational centers within each community college service region.

The programs included in these agreements differ from one service region to another. However, programs frequently included are business education-secretarial science, automotive mechanics and drafting while other programs include electricity/electronics, nursing, machine shop, data processing, accounting, welding and business management. Most service regions have selected programs offered by most school systems in the region and where maximum cooperation exists. To begin the development of an articulation agreement, Table 2 provides a summary of the programs being articulated in each service region.

Community colleges and secondary schools derive many benefits from participating in the development of articulation agreements. An initial benefit indicated by most involved in articulation is that the working relationships between the community colleges and their service region school systems are greatly improved. Where articulation agreements are in place, these service regions are beginning to participate in joint program development and improvement. An additional benefit, indicated by a few, is improved vocational program enrollment. However, in most service regions articulation agreements are not in place, and benefits other than improved relations have not had sufficient time to develop. In three service regions - Central Virginia, Thomas Nelson and Southwest Virginia - where articulation agreements have been implemented and updated, there is evidence of the beginning of regional vocational program development. In the Thomas Nelson Community College Service Region, a major effort is underway with the development of the new high technology high school and the "2 + 2" high technology programs being developed jointly by public school, community college and business and industry personnel. Efforts in continued articulation and joint program development are also being conducted within the Central Virginia and Southwest Virginia community college service regions. In both of these service regions, data processing and computer related curricula are being reviewed by public school and community college instructors to determine what content should be taught and at what level it should be taught.

The benefits of articulation are already evident, working relationships are improving, enrollment in vocational programs shows some improvement and

joint program development and vocational planning are beginning. Additional benefits such as shared use of facilities and faculty members, improved quality of vocational programs and better service to the community are currently being discussed in many areas and carried out in others. Continued support for articulation can only result in the strengthening of vocational education in Virginia.

Recommendations for Future State-Wide Support for Articulation

The state-wide efforts of promoting and assisting in the development of articulation have been a success. Ninety percent of the community colleges and public schools are involved to some degree in the development of articulation agreements. Thus, the following recommendations are made to provide direction for continued efforts in the area of secondary/postsecondary vocational program articulation.

Recommendation 1. The state-wide coordination project should be funded again in order to provide direction and continuity in the effort to develop articulation agreements in all 23 community college service regions in Virginia.

Recommendation 2. The state-wide coordination project should continue to support articulation by developing information and resources on methods and models in joint program development and planning to assist public schools and community colleges in expanding on their articulation agreements.

Recommendation 3. The state-wide coordination project should support articulation by developing information and resources on methods and models to assist public schools and community colleges with the development of cooperative training programs with and support from business and industry.

Recommendation 4. The state-wide coordination project should support articulation by providing "mini grants" to assist community college service regions with the continued development of articulation agreements, to assist with joint program development and planning and/or to assist with the development of cooperative arrangements with and support from business and industry.

Table 1

ARTICULATION STATUS FOR COMMUNITY COLLEGE SERVICE REGIONS
(as of March 6, 1985)

Articulation Plan	Articulation Agreement	Review & Modify Articulation Agreement	No Formal Articulation Plans or Agreements
SERVICE REGION	SERVICE REGION	SERVICE REGION	SERVICE REGION
- Blue Ridge	- Danville	- Central Virginia	- Piedmont Virginia
- Dabney Lancaster	- Eastern Shore	- Southwest Virginia	- Mountain Empire
- Germanna	- Lord Fairfax	- Thomas Nelson	- Northern Virginia
- John Tyler	- New River		- Loudoun
- J. Sargeant Reynolds	- Northern Virginia		
- Northern Virginia	- Alexandria ('85)		
- Woodbridge ('85)	- Annandale ('84)		
- Patrick Henry	- Manassas ('84)		
- Paul D. Camp	- Rappahannock		
- Southside	- Virginia Highlands		
- Tidewater	- Virginia Western		
	- Wytheville		

Table 2

ARTICULATION PROGRAM SUMMARY

(as of March 6, 1985)

Programs to be Articulated / Service Region	Ac-count-ing	Auto Mech	Bus Mgt	BusEd SecSc	Comp Aided Design	Data Proc	Draft-ing	Elec/ Electr	Eng Tech	Forestry	Mach Shop	Nursing Health Occ	Trade & Indus	Welding
Blue Ridge	X	U		U			X	U				X		
Central Virginia		A				U	A	A			A			
Dabney Lancaster				X		U	X	U		U		U		
Danville		X		X		X								
Eastern Shore				X										
Germanna		X		X										
J. Sargeant Reynolds														
John Tyler				U				U	U					
Lord Fairfax				X										
Mountain Empire														
New River				X		X								
Northern Virginia		X				X						X		X
Patrick Henry				U		U								
Paul D. Camp			X				X	X						
Piedmont Virginia					X									X
Rappahannock	X			X										
Southside Virginia				X										
Southwest Virginia				A		X		A			A			A
Thomas Nelson				A			A				A			
Tidewater				X										
Virginia Highlands				X			X	X				U		
Virginia Western		X		X								X		
Wytheville				X			X				X			

A - Articulation agreement established X - Involved in articulation of these programs U - Programs under consideration for future articulation

BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION

This service region is actively working toward establishing an articulation plan. They have established an articulation committee which has met several times and developed a draft of a plan to be submitted to service region superintendents and the college president for approval. This service region has targeted nursing, typewriting and shorthand as subject matter areas for developing initial articulation agreements in 1985 with electronics, automotive mechanics, data processing, accounting and drafting listed for consideration in 1986.

School systems within this service region are:

- Augusta County
- Highland County
- Harrisonburg City
- Staunton City
- Rockingham County
- Waynesboro City
- Valley Vocational-Technical School
- Massanutten Vocational-Technical Center

CENTRAL VIRGINIA COMMUNITY COLLEGE SERVICE REGION

This service region has articulation agreements in place for automotive mechanics, machine shop, trade and industrial education, and drafting, and these agreements are reviewed and revised annually. Efforts in articulation are continuing in the area of computer science. Meetings are being held by administrators and faculty to determine how and where to best present various aspects of this program. In addition, the service region is currently upgrading competencies in drafting.

School systems within this service region are:

- Amherst County
- Appomattox County
- Bedford County
- Campbell County
- Lynchburg City

DABNEY S. LANCASTER COMMUNITY COLLEGE SERVICE REGION

This service region is actively involved in developing an articulation plan. An articulation committee has been established and subcommittees are developing a draft of an articulation plan. Secretarial science and mechanical design are programs targeted for initial development of articulation agreements with data processing, electronics, nursing and forestry listed for future consideration. The articulation plan will be approved by May 1, 1985.

School systems within this service region are:

- Alleghany County
- Bath County
- Botetourt County (shared with Va. Western)
- Buena Vista
- Covington
- Rockbridge County
- Jackson River Vocational Center

DANVILLE COMMUNITY COLLEGE SERVICE REGION

Danville Community College Service Region indicated they would develop and implement an articulation agreement in secretarial science. Data processing and automotive mechanics were two additional areas in which articulation agreements were to be developed. However, very little formal activity on this year's articulation project has taken place. Meetings are planned for late February and March. It is hoped that satisfactory progress will be made at these sessions and articulation agreements will be developed.

School systems within this service region are:

- Danville City
- Halifax County (shared with Southside)
- Pittsylvania County

EASTERN SHORE COMMUNITY COLLEGE SERVICE REGION

The articulation committee for this service region has met several times and a plan for developing an articulation agreement in secretarial science has been developed. The program subcommittee is currently meeting to identify competencies that are taught at both levels. An approved articulation agreement in secretarial science will be completed by May 1, 1985.

School systems in this service region are:

- Accomack County
- Cape Charles Schools
- Northampton County

GERMANNA COMMUNITY COLLEGE SERVICE REGION

Germanna Community College Service Region has continued its efforts to establish articulation agreements in secretarial science and automotive mechanics. However, no formal agreements have been developed.

School systems within this service region are:

- Caroline County (shared w/Rappahannock)
- Culpeper County
- Fauquier County (shared w/Lord Fairfax)
- Fredericksburg City
- King George County (shared w/Rappahannock)
- Madison County
- Orange County
- Spotsylvania County
- Stafford County
- Piedmont Vocational Center

J. SARGEANT REYNOLDS COMMUNITY COLLEGE SERVICE REGION

This service region has made steady progress in its efforts to develop formal articulation agreements without the financial assistance of the Articulation Project. An articulation plan has been approved and committees of faculty in six curriculum areas are identifying specific programs and courses for which articulation agreements may be developed.

School systems within this service region are:

- Goochland County
- Hanover County
- Henrico County
- Louisa County (shared w/Piedmont VA)
- Powhatan County
- Richmond City (shared w/John Tyler)

JOHN TYLER COMMUNITY COLLEGE SERVICE REGION

The efforts toward establishing an articulation plan in this service region have proceeded on an informal basis to date. Working relationships are improving and the college dean or division chairmen have met individually with all vocational directors of the service region. As a result of these individual meetings, a formal session was held the last week in February with community college division chairmen and public school vocational directors and faculty in the areas of engineering technology, business and electronics in order to explore the possibility of establishing articulation agreements in these subject matter areas.

School systems within this service region are:

- Amelia County
- Charles City County
- Chesterfield County
- Colonial Heights
- Dinwiddie County
- Hopewell City
- Petersburg City
- Prince George County
- Richmond City (shared w/J. Sargeant Reynolds)
- Surry County
- Sussex County
- Amelia-Nottoway Vocational Center
- Rowanty Vocational Center

LORD FAIRFAX COMMUNITY COLLEGE SERVICE REGION

This service region has an approved articulation agreement and is in the process of implementing this agreement in specific subject matter areas. An articulation committee has been established and business is the initial subject matter area in which the agreement will be implemented. All counties of the service region but Fauquier County are participating and a meeting of community college and public school business faculty will be held on March 6, 1985, in order to initiate implementation of the articulation agreement.

School systems within this service region are:

- Clarke County
- Fauquier County (shared with Germanna)
- Frederick County
- Rappahannock County
- Shenandoah County
- Warren County
- Winchester City
- Page County
- Dowell J. Howard Vocational Center

MOUNTAIN EMPIRE COMMUNITY COLLEGE SERVICE REGION:

This service region is not involved in any articulation activities.

School systems within this service region are:

- Dickenson County (shared with Southwest VA)
- Lee County
- Norton City
- Scott County
- Wise County

NEW RIVER COMMUNITY COLLEGE SERVICE REGION

The articulation committee of the New River Community College Service Region has met several times and developed a plan of action and schedule for developing articulation agreements in drafting and design and secretarial science. The program subcommittees are meeting to identify mutually taught competencies and to develop the levels of advance placement for participating secondary students. Approved articulation agreements in these two program areas will be ready by May 1, 1985.

School systems in this service region are:

- Floyd County
- Giles County
- Montgomery County
- Pulaski County
- Radford City

NORTHERN VIRGINIA COMMUNITY COLLEGE

ALEXANDRIA CAMPUS SERVICE REGION

The Alexandria campus of Northern Virginia Community College has developed an approved articulation plan with the two school systems, Alexandria and Arlington, in the campus service region. Automotive mechanics is the first program area in which an articulation agreement is being developed. The automotive program subcommittee has met and developed a rough draft of the agreement. This draft will be finalized and approved by May 1, 1985.

School systems within this campus service region are:

- Alexandria Public Schools
- Arlington Public Schools
- Falls Church Public Schools

ANNANDALE CAMPUS SERVICE REGION

The Annandale Campus of Northern Virgnia Community College has continued to work toward articulation in four program areas despite not having their mini project funded. The four program areas include automotive mechanics, welding, business data processing and nursing. They expect to complete agreement in these programs by the end of the academic year.

The school system within this service region is:

- Fairfax County

LOUDOUN CAMPUS SERVICE REGION

No formal efforts in articulation have been initiated for this campus of Northern Virginia Community College. However, a faculty member in the horticulture program is making an effort to articulate with the high schools in horticulture.

The school system within this service region is:

- Loudoun County

MANASSAS CAMPUS SERVICE REGION

The development of articulation agreements has continued on the Manassas Campus despite their mini project not being funded this year. A draft of an articulation agreement has been developed for automotive mechanics and excellent progress is also being made in the secretarial science program. Final approved articulation agreements are expected to be completed by the end of this academic year.

School systems within this service region are:

- City of Manassas
- City of Manassas Park

WOODBRIDGE CAMPUS SERVICE REGION

The Woodbridge campus of Northern Virginia Community College is working toward establishing an articulation plan with Prince William County School System. The plan will indicate that data processing, secretarial science and business will be the areas in which articulation agreements will be developed. Students entering these programs at the Woodbridge campus will take ABLE examinations to establish grade levels to be used for advanced placement for high school students. Approval of the articulation plan should be obtained by May 1, 1985.

The school system in the campus' service region is:

- Prince William County Schools

PATRICK HENRY COMMUNITY COLLEGE SERVICE REGION

This service region had developed an articulation plan during the 1983-84 academic year. The focus of their articulation agreement was to be in the program areas of data processing and secretarial science. However, no progress toward a formal articulation agreement has occurred this year although the lines of communication remain open between the college and the school systems of the service region.

School systems within this service region are:

- Franklin County (shared w/Virginia Western)
- Henry County
- Martinsville City
- Patrick County

PAUL D. CAMP COMMUNITY COLLEGE SERVICE REGION

Personnel changes at both the community college and public schools in the service region have resulted in a slow start on this year's project. However, an articulation committee has been established and progress is being made toward the development of articulation agreements in drafting, electricity and business management. It is felt that approval of agreements in these areas will be obtained by May 1, 1985.

School systems within this service region are:

- Franklin City
- Isle of Wight County (shared w/ Tidewater)
- Suffolk City (shared w/Tidewater)
- Southampton County
- P. D. Pruden Vocational Center

PIEDMONT VIRGINIA COMMUNITY COLLEGE SERVICE REGION

Piedmont Virginia Community College continues to maintain informal agreements with Charlottesville-Albemarle Technical Education Center. Currently, these two institutions are working toward formal agreements in the computer aided design, welding, apprenticeship maintenance mechanics programs. However, other counties in this service region are not involved in these agreements.

School systems within this service region are:

- Albemarle County
- Buckingham County (shared w/ Southside Virginia)
- Charlottesville City
- Fluvanna County
- Greene County
- Louisa County
- Nelson County
- Charlottesville-Albemarle Vocational-Technical Center

RAPPAHANNOCK COMMUNITY COLLEGE SERVICE REGION

Twelve of the 13 counties in this service region have participated with the community college in the development of an approved articulation plan. The articulation committee has oriented and involved all counselors, high school principals and the faculty in the business and secretarial program areas to the processes and procedures involved in articulation. Business program area subcommittees have developed drafts of articulation agreements for Filing & Records Management, Machine Transcription, Shorthand I, Accounting I and/or Applied Accounting I, Typewriting I, II and Advanced Typewriting. These agreements are under review and will be approved by May 1, 1985.

School systems within this service region are:

- Caroline County (shared w/Germanna)
- Essex County
- Gloucester County
- King George County (shared w/ Germanna
- King & Queen County
- King William County & Town of West Point
- Lancaster County
- Mathews County
- Middlesex County
- New Kent County
- Northumberland County
- Richmond County
- Westmoreland County
- Northern Neck Vocational Center

SOUTHSIDE VIRGINIA COMMUNITY COLLEGE SERVICE REGION

Activity on this year's project has not yet begun. A meeting of faculty in business education and secretarial science is planned for late February. At this meeting and at additional sessions, if necessary, the faculty will develop articulation agreements for clerical subjects which are a part of the secretarial science program.

School systems within this service region are:

- Brunswick County
- Buckingham County (shared w/ Piedmont VA)
- Charlotte County
- Cumberland County
- Greensville County
- Halifax County (shared w/Danville)
- Lunenburg County
- Mecklenburg County
- Nottoway County
- Prince Edward County
- Amelia-Nottoway Vocational Center

SOUTHWEST VIRGINIA COMMUNITY COLLEGE SERVICE REGION

Articulation agreements are in place in this service region for electronics, machine shop, stenographic skills, and welding. Efforts in articulation and regional vocational education planning are continuing in the area of data processing. Data processing faculty are meeting to determine at what level keyboarding skills should be presented. The community college is also providing classes to enable elementary and secondary instructors to become computer literate.

School systems within this service region are:

- Buchanan County
- Dickenson County (shared w/Mountain Empire)
- Russell County
- Tazewell County

THOMAS NELSON COMMUNITY COLLEGE SERVICE REGION

This service region has an approved articulation agreement in the areas of secretarial science, drafting and machine technology. This agreement has been in place for three years and is reviewed regularly. This service region is currently developing a high technology 2 + 2 program with a newly developing technical high school that will be built adjacent to Thomas Nelson Community College.

School systems within this service region are:

- Hampton City
- Newport News City
- Poquoson City
- Williamsburg-James City
- York County
- Virginia Peninsula Vocational Center

TIDEWATER COMMUNITY COLLEGE SERVICE REGION

Efforts in articulation are continuing in the Tidewater Community College Service Region. The preliminary phase of an articulation agreement in secretarial science has been agreed upon and final drafting and approval of the agreement is expected to be completed by the end of the academic year. The development of this agreement includes all campuses and school systems within the college's service region.

School systems within this service region are:

- City of Chesapeake
- Isle of Wight County (shared w/Paul D. Camp)
- City of Norfolk
- City of Portsmouth
- City of Suffolk (shared w/Paul D. Camp)
- City of Virginia Beach

VIRGINIA HIGHLANDS COMMUNITY COLLEGE SERVICE REGION

This project has not been active this year. The first formal meeting of the articulation committee was scheduled February 20, 1985. This project had intended to develop articulation agreements in drafting, electricity, business education studies and nursing. Strategies for developing these agreements were discussed at this meeting on the 20th of February. An additional meeting is scheduled in March to bring faculty together to identify common competencies.

School systems within this service region are:

- Bristol City
- Smyth County (shared w/Wytheville)
- Washington County

VIRGINIA WESTERN COMMUNITY COLLEGE SERVICE REGION

The articulation committee is carrying out the approved articulation plan. Three program subcommittees, business education, automotive mechanics and health occupations are working to identify mutually taught competencies and to develop drafts of articulation agreements for their subject matter areas. The articulation agreements will be completed by the subcommittees by April 1, 1985, and approved by the superintendents and the college president by May 1985.

School systems within this service region are:

- Botetourt County (shared w/Dabney S. Lancaster)
- Craig County
- Franklin County (shared w/Patrick Henry)
- Roanoke County
- Roanoke City
- Salem City

WYTHEVILLE COMMUNITY COLLEGE SERVICE REGION

The school systems in the service region have established an articulation agreement for drafting, machine shop and secretarial science. They have continued to work informally on improving the working relationships among the school systems and the community college. However, little effort has been made to improve on the formal articulation agreement. An initial meeting is being held March 7, 1985, to determine what steps need to be taken to improve and build upon the initial articulation agreement in this service region.

School systems in this service region are:

- Bland County
- Carroll County
- Grayson County (shared w/Virginia Highlands)
- Galax City
- Wythe County

APPENDIX J

Sample Program Grid

BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION PROGRAM ARTICULATION GRID

AUGUSTA COUNTY

Public School Programs	Buffalo Gap HS	Ag. Business	Ag. Production	Ag. Science & Mechanics	Natural Resources Management	Communications Technology	Drafting	Engineering Technology	Ft. Defiance HS	Ag. Business	Ag. Machinery	Ag. Production	Ag. Science & Mechanics	Drafting	Riverheads HS	Ag. Business	Ag. Machinery	Ag. Production	Ag. Science & Mechanics	Stuart's Draft HS	Ag. Machinery	Ag. Production	Ag. Science & Mechanics	Drafting
Community College Programs / # of Years / Degree																								
Accounting AAS																			P				P	
Animal Husbandry AAS				P									P						P				P	
Animal Technology AAS				P									P											
Data Processing AAS																								
Electronics AAS																		P						
Banking & Finance AAS											P										P			
Management AAS			P						P															
Mechan. Design Tech AAS																								
Mental Health AAS																								
Nursing AAS																								
Certified Prof. Sec AAS																		P		P			P	
Executive Sec. AAS													P											
Auto. Anal. & Rep. D						P																		
Career Studies C																							P	
Clerical Studies C																		P						
Clerk-Stenography C													P											
Diesel Mechanics C									P															
Drafting C																								
Elec. Training Prog C																								
Electronics Serv. C																								
Gen. Retail Merch. C												P						P						
Supervision C				P																				

NOTE: A = Articulated Programs P = Possible Programs for Articulation

COMMUNITY COLLEGE DEGREE TYPES: C = Certificate AAS = Associate in Applied Science AS = Associate in Science AA = Associate in Arts D = Diploma

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BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION PROGRAM ARTICULATION [illegible]

Public School Programs		AUGUSTA COUNTY (cont.)								HARRISONBURG CITY									HIGHLAND COUNTY																			
Community College Programs	Degree	Wilson Memorial HS # of Years	Ag. Business	Ag. Production	Ag. Science & Mechanics	Horticulture	Natural Resources Management	Communications Technology	Drafting	Harrisonburg HS	Gen. Office & Admin. Support	Technology Office	Secretarial Administration	Shorthand	Drafting	Fashion Merchandising	General Marketing	Highland HS	Ag. Production	Ag. Science & Mechanics	Natural Resources Management	General Business	Office Technology	Child Care														
Accounting	AAS																																					
Animal Husbandry	AAS				P																			P														
Animal Technology	AAS				P																			P														
Data Processing	AAS																																					
Electronics	AAS																																					
Banking & Finance	AAS																																					
Management	AAS			P															P	P							P											
Mech. Design Tech.	AAS																	P																				
Mental Health	AAS																																					
Nursing	AAS																																					
Certified Prof. Sec	AAS													P	P	P	P																					
Executive Sec.	AAS													P	P	P	P																					
Auto. Anal. & Rep.	D																																					
Career Studies	C																																					
Clerical Studies	C													P	P	P												P										
Clerk-Stenography	C													P	P	P																						
Diesel Mechanics	C																																					
Drafting	C																	P																				
Elec. Training Prog.	C																																					
Electronics Serv.	C																																					
Gen. Retail Merch.	C																		P	P																		
Supervision	C			P										P		P			P	P							P											

NOTE: A = Articulated Programs P = Possible Programs for Articulation
COMMUNITY COLLEGE DEGREE TYPES: C = Certificate AAS = Associate in Applied Science AS = Associate in Science AA = Associate in Arts D = Diploma

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BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION PROGRAM ARTICULATION GRID

AUGUSTA COUNTY, STAUNTON CITY, WAYNESBORO CITY HARRISONBURG CITY, ROCKINGHAM COUNTY

Public School Programs / Community College Programs	# of years / Degree	Valley Vo-Tech	Accounting & Data Processing	Secretarial Sc.	Nursing	Automotive Technology	Drafting	Electronics	Machine Technology	Massanutten Vo-Tech	Data Processing	Dental Aide	Health Assistant	Practical Nursing	Fashion Construct. & Alterations	Automotive Repair	Auto Mechanics	Carpentry/ Cabinetmaking	Cosmetology	Drafting	Electricity	Electronics	Heavy Equipment Mechanics	Machine Shop	Maintenance & Repair - Welding	Masonry	Plumbing & Pipefitting	Offset Printing
Accounting	AAS			P																								
Animal Husbandry	AAS																											
Animal Technology	AAS																											
Data Processing	AAS			P																								
Electronics	AAS																											
Banking & Finance	AAS			P																		P	P					
Management	AAS																											
Mechanical Design Tech	AAS								P		P																	
Mental Health	AAS						P																		P			
Nursing	AAS						A								P	P												
Certified Prof. Sec.	AAS					P										A												
Executive Sec.	AAS					P																						
Automotive Anal. & Rep	D							P																				
Career Studies	C																		P									
Clerical Studies	C					P																						
Clerk-Stenography	C					P																						
Diesel Mechanics	C							P																				
Drafting	C								P										P					P				
Elec. Training Program	C									P											P							
Electronics Servicing	C									P												P	P				
Gen. Retail Merchand.	C																					P	P					
Supervision	C					P		P			P					P		P	P		P			P		P	P	P

Note: A = Articulated Programs P = Possible Programs for Articulation

(a) Community College Degree Types: C = Certificate AAS = Associate In Applied Science AS = Associate In Science AA = Associate In Arts D = Diploma

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BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION PROGRAM ARTICULATION GRID

ROCKINGHAM COUNTY

Public School Programs / Community College Programs	# of Years / Degree	Broadway HS	Ag. Business	Ag. Machine Serv.	Ag. Production	Ag. Science & Mechanics	Gen. Office & Admin. Support	Office Technology	Secretarial & Admin. Supp. Occ.	Sec., Word Proc., Admin. Supp. Occ.	Merchandising	Fashion	General Marketing	Spotswood HS	Ag. Business	Ag. Machine Service	Ag. Production	Ag. Science & Mechanics	Accounting	Data Processing	Gen. Office & Admin. Support	Office Technology	Secretarial Administration	Sec., Word Proc., Admin. Supp. Occ.	General Marketing	Turner Ashby HS	Ag. Business	Ag. Machine Service	Ag. Production	Ag. Science & Mechanics	Data Processing	Gen. Office & Admin. Support
Accounting	AAS																				P											
Animal Husbandry	AAS					P													P												P	
Animal Technology	AAS					P													P												P	
Data Processing	AAS																					P										P
Electronics	AAS																															
Banking & Finance	AAS																															
Management	AAS											P	P																			
Mech. Design Tech.	AAS																									P						
Mental Health	AAS																															
Nursing	AAS																															
Certified Prof. Sec	AAS							P	P	P	P																					
Executive Sec.	AAS							P	P	P	P												P	P	P	P						P
Auto. Anal. & Rep.	D				P																		P	P	P	P						P
Career Studies	C																	P														
Clerical Studies	C							P	P	P	P																					
Clerk-Stenography	C							P	P	P	P												P	P	P	P						P
Diesel Mechanics	C				P													P					P	P	P	P						P
Drafting	C																													P		
Elec. Training Prog	C																															
Electronics Serv.	C																															
Gen. Retail Merch.	C											P	P																			
Supervision	C			P						P	P	P	P				P								P	P	P			P		P

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BLUE RIDGE COMMUNITY COLLEGE SERVICE REGION PROGRAM ARTICULATION GRID

Public School Programs / Community College Programs	Degree	ROCKINGHAM COUNTY (cont.) Office Technology	Secretarial Administration	Sec., Word Proc., & Adm. Supp. Occ.	Fashion Merchandising	General Marketing	STAUNTON CITY Robert E. Lee HS	Accounting	Office Technology	Shorthand	Child Development	Home Furnishing & Housing	Drafting	Fashion Merchandising	General Marketing	WAYNESBORO CITY Waynesboro HS	Adm. & Supp. Occ.	Gen. Office	Office Technology	Sec., Word Proc., Admin. Supp. Occ.	Drafting	General Marketing
Accounting	AAS									P												
Animal Husbandry	AAS																					
Animal Technology	AAS																					
Data Processing	AAS																					
Electronics	AAS																					
Banking & Finance	AAS																					
Management	AAS				P	P									P	P						P
Mech. Design Tech.	AAS													P							P	
Mental Health	AAS																					
Nursing	AAS																					
Certified Prof. Sec	AAS	P	P	P							P	P							P	P	P	
Executive Sec.	AAS	P	P	P							P	P							P	P	P	
Auto. Anal. & Rep.	D																					
Career Studies	C																					
Clerical Studies	C	P	P	P							P	P							P	P	P	
Clerk-Stenography	C	P	P	P							P	P							P	P	P	
Diesel Mechanics	C																					
Drafting	C													P							P	
Elec. Training Prog	C																					
Electronics Serv.	C																					
Gen. Retail Merch.	C				P	P								P	P							P
Supervision	C		P	P	P	P					P			P	P				P	P	P	P

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COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

MEMORANDUM

TO: Deans of Instruction and Vocational Directors

FROM: E. Lynn Suydam
Project Director

SUBJECT: Articulation Survey

DATE: May 6, 1985

Your institution has been involved in the development of an articulation plan and/or articulation agreement over the past academic year. In order to determine the perceptions of the administrators, faculty and counselors who participated in the development of these plans and/or agreements, I would appreciate your assistance in conducting the attached survey.

Please complete one of the survey instruments yourself and distribute the remaining three survey forms at random to faculty and counselors at your institution who were involved in some way in the development of the articulation plan/agreement. Try and select a representative from all programs involved in the articulation plan/agreement. Collect the completed survey forms and return them to the address below by May 15, 1985.

If you have questions concerning this matter, please contact me at (703) 961-5812. Thank you for your assistance.

Send the completed forms by May 15, 1985, to:

Dr. E. Lynn Suydam
Division of Vocational & Technical Education
Room 334, Lane Hall
Virginia Tech
Blacksburg, VA 24061

Enclosure

ELS/ebm

ARTICULATION SURVEY

Please complete the following questions and return this form to your dean or director of vocational education as soon as possible.

1. Did you participate in the development of the articulation plan and/or agreement between the public schools and the community college in your region? (Circle correct answer.)

   yes no

2. What position do you hold at your institution? (Circle correct answer.)

   faculty administration counselor other

3. Do you feel that the development of the articulation plan/agreement will be beneficial for the students in the programs for which you are responsible or in which you teach? (Circle correct answer.)

   yes no

   Comments _____

4. If not beneficial, why not? _____

   _____

5. If you feel that articulation will be beneficial, check or indicate below the ways that you feel articulation will benefit the students in your program.

   _____ Produce better quality students.

   _____ Reduce the time students will remain in school.

   _____ Increase the number of students who graduate from your program.

   _____ Motivate students to do better work.

   _____ Attract better quality students to your program.

   Others: _____

   _____

6. If you feel that articulation is beneficial, check or indicate below how you feel that articulation will benefit you in your work.

   _____ Improve the quality of my instruction.

   _____ Cause me to evaluate the students more critically.

(over)

_____ Improve communication with other instructors in my discipline.

_____ Improve communication and cooperation between community college and public school personnel.

_____ Increase enrollment in my courses and program.

_____ Improve the quality of students in my courses and program.

Others: _____

_____

7. Do you feel that articulation should be expanded to include other programs at your institution? (Circle correct answer.)

   yes no

8. Please include other comments you may have concerning the pros and cons of articulation at your institution in the space provided below.

THANKS FOR YOUR ASSISTANCE!

ARTICULATION SURVEY SUMMARY

A. # of community colleges and public schools surveyed

15	Community colleges
93	Public school systems
108	Total

B. # and % of community colleges and public schools returning the survey

#	%	
10	67%	Community colleges
46	49%	Public schools
56	52%	Total return

C. # of survey instruments mailed out

60	Community colleges
372	Public schools
432	Total number of surveys mailed

D. # and % of survey instruments returned

#	%(of total)	
* 43	72%	Community colleges
*150	40%	Public schools
193	45%	Total return

E. Did you participate in the development of the articulation plan/agreement?

	YES			NO		
	# Returned	% of total Return	% of Total	# Returned	% of total Return	% of Total
Public School						
Faculty	67	44%	18%	4	3%	1%
Administrators	61	40%	16%	3	2%	1%
Counselors	8	6%	2%	2	2%	0
Other	1	1%	0	-	-	0
Total	137	90%	37%	12	7%	3%
(1 gave no response)						
Community College						
Faculty	19	44%	31%	1	5%	2%
Administrators	19	44%	31%	-	-	-
Counselors	2	4%	3%	1	33%	2%
Other	1	2%	2%	-	-	-
Total	41	95%	68%	2	3%	3%

F. What positions do the respondents hold at their institutions?

	# Returned	% of total Return	% of Total
Public School			
Faculty	74	49%	20%
Administrators	65	43%	17%
Counselors	10	7%	3%
Other	1	1%	0
Total	80	53%	22%
Community college			
Faculty	20	46%	33%
Administrators	19	44%	31%
Counselors	3	7%	5%
Other	1	2%	1%
Total	43	100%	71%

G. Is articulation beneficial for the students in your institutions?

	YES			NO		
	# Returned	% of Total Return	% of Total	# Returned	% of Total Return	% of Total
Public Schools	147	98%	40%	2	1%	-
Community College	43	100%	71%	-	-	-

H. How will articulation benefit the students?

	Total Return	# This Response	% Return +	% Total ++
1. Produce better quality students.				
Public School				
Faculty	74	36	24%	10%
**Administrators	66	28	19%	7%
Counselors	10	3	5%	1%
Total	150	72	48%	19%
Community College				
Faculty	20	5%	12%	8%
**Administrators	20	10%	23%	16%
Counselors	3	2	5%	3%
Total	43	17	39%	28%

	Total Return	# This Response	% Return +	% Total ++
2. Reduce the time students remain in school.				
Public School				
Faculty	74	37	25%	10%
**Administrators	66	36	24%	10%
Counselors	10	3	2%	1%
Total	150	76	51%	20%
Community College				
Faculty	20	8	18%	13%
Administrators	20	13	30%	22%
Counselors	3	2	5%	3%
Total	43	23	53%	38%
3. Increase the number of students who graduate from your program.				
Public School				
Faculty	74	24	16%	6%
**Administrators	66	20	13%	5%
Counselors	10	4	3%	1%
Total	150	48	32%	13%
Community College				
Faculty	20	10	23%	17%
**Administrators	20	13	30%	22%
Counselors	3	3	7%	5%
Total	43	26	60%	43%
4. Motivate students to do better work.				
Public School				
Faculty	74	73	49%	20%
**Administrators	66	53	35%	14%
Counselors	10	9	6%	2%
Total	150	135	90%	36%
Community College				
Faculty	20	12	28%	20%
**Administrators	20	17	39%	28%
Counselors	3	2	5%	3%
Total	43	31	72%	52%
5. Attract better quality students to your program.				
Public School				
Faculty	74	31	21%	8%
Administrators	66	35	23%	9%
Counselors	10	6	4%	2%
Total	150	72	48%	19%

	Total Return	# This Response	% Return +	% Total ++
5. (cont.)				
Community College				
Faculty	20	11	26%	18%
**Administrators	20	16	37%	27%
Counselors	3	3	7%	5%
Total	43	30	70%	50%

I. How will articulation benefit you (teacher, administrator, counselor) in your work?

1. Improve the quality of instruction.

Public School				
Faculty	74	25	17%	7%
Administrators	66	16	11%	4%
Counselors	10	4	3%	1%
Total	150	45	30%	12%
Community College				
Faculty	20	3	7%	5%
Administrators	20	7	16%	12%
Counselors	3	2	5%	3%
Total	43	12	28%	20%

2. Cause me to evaluate the students more.

Public School				
Faculty	74	42	28%	11%
**Administrators	66	23	15%	6%
Counselors	10	6	4%	2%
Total	150	71	47%	19%
Community College				
Faculty	20	6	14%	10%
**Administrators	20	7	16%	12%
Counselors	3	1	2%	2%
Total	43	14	32%	23%

3. Improve communication with other instructors in my discipline.

Public School				
Faculty	74	42	28%	11%
Administrators	66	25	17%	7%
Counselors	10	3	2%	1%
Total	150	70	47%	19%
Community College				
Faculty	20	19	44%	32%
Administrators	20	14	32%	23%
Counselors	3	2	5%	3%
Total	43	35	81%	58%

	Return	Response	% Return +	% Total ++
4. Improve communication and cooperation between community college and public school personnel.				
Public School				
Faculty	74	71	47%	19%
**Administrators	66	55	37%	15%
Counselors	10	9	6%	2%
Total	150	135	90%	36%
Community College				
Faculty	20	20	46%	33%
**Administrators	20	18	42%	30%
Counselors	3	3	7%	5%
Total	43	41	95%	68%
5. Increase enrollment in my courses and programs.				
Public School				
Faculty	74	16	11%	4%
Administrators	66	11	7%	3%
Counselors	10	3	2%	1%
Total	150	30	20%	8%
Community College				
Faculty	20	13	38%	22%
Administrators	20	12	28%	20%
Counselors	3	3	7%	5%
Total	43	28	65%	47%
6. Improve the quality of students in my courses and programs.				
Public School				
Faculty	74	29	19%	8%
Administrators	66	20	13%	5%
Counselors	10	4	3%	1%
Total	150	53	35%	14%
Community College				
Faculty	20	9	21%	15%
Administrators	20	10	23%	16%
Counselors	3	2	5%	3%
Total	43	21	49%	35%

J. Do you feel that articulation should be expanded to include other programs at your institution?

	YES			NO		
	# Returned	% of total Return +	% of Total ++	# Returned	% of total Return +	% of Total ++
Public School						
Faculty	65	43%	17%	5	3%	1%
**Administrators	57	38%	15%	2	1%	1%
Counselors	10	7%	3%	-	-	-
Total	132	88%	35%	6	4%	2%
Community College						
Faculty	16	37%	27%	2	5%	3%
**Administrators	21	49%	35%	1	2%	2%
Counselors	3	7%	12%	-	-	-
Total	40	93%	67%	3	7%	5%

** Represents combined responses for Administrators and Other categories.

+ Determined as follows: # indicating this response ÷ the total return for public school or community college faculty, administrators or counselors, respectively.

++ Determined as follows: # indicating this response ÷ total public school or community college surveys mailed.

Comments

Question #3

Public school faculty

- It may result in students doing better work.
- Articulation will give some students an incentive to do better work.
- Seems to make good sense
- Competency sheet for classes will be helpful.
- The student will have something to work toward and will know where he will start in drafting at the community college.
- I think it is a great idea for students to be given credit for areas in which they are proficient.
- And in application of processes taught; also in job placement.
- Long overdue.
- Avoid repeating subject matter; save time.

Public school administrators

- Offers more for the students; heightens awareness of past high school educational opportunities.
- Provides career ladder and better education and skilled workers.
- If students are aware of this program, they will seek to do better quality work. (2)
- By encouraging high school students to get a more advanced degree.
- It has been too long in coming.
- A necessary step.
- Not involved in program.
- Less overlap in curriculum.

Public school counselor

- The development of the plan is beneficial in providing advanced placement for students having a thorough foundation in a particular area.

Community college faculty

- About time.
- Prevents duplication of already learned material.

Question #4

Public school faculty

- I don't teach those programs.

Question #5

Public school faculty

- Reduce instructional repetition. (2)

Question #5 (cont.)

Public school administrators

- Advanced placement; lack of duplication; economical; allow for more efficient instruction.
- Articulation should keep the student from repeating competencies he/she has already mastered.
- Not have the college "turn off" high school completers by requiring students to repeat work.
- Course work will be less repetitious.
- Motivate students to complete program.
- Educational opportunity beyond high school.
- Gives recognition to the secondary program in the eyes of administrators and counselors, etc. by providing college credit for the high school student.
- Students will appreciate cooperation between secondary school and the community college.
- Allow transferable credit for two courses between two schools - Fundamentals of Nursing I & II.

Public school counselors

- Will encourage students to attend the community college.
- Give more students conscious options in varied fields.

Community college administrators

- Will provide a continual sequence of courses to accomplish a 2 plus 2 program.

Community college counselors

- Attract more students.

Question #6

Public school faculty

- Articulation will also improve the image of the program and improve prestige.

Public school administrators

- I believe all of these factors will be true for the teachers of these courses.
- Articulation is no big deal.
- Agree with all from an administrative point of view.
- Provide better educational opportunities for students at more economical rates.
- This is not to say that communications are presently bad - only one meeting with the community college - we are just beginning.
- Gives me opportunity to have first hand knowledge of the community college.

Question #7

Public school administrators

- Only where appropriate.
- Specific vocational programs have not been designated for articulation in our school division.

Community college counselors

- Will improve placement in program and give student services personnel more information and strategies with which to recruit.

Question #8

Public school faculty

- All vocational areas need to develop an articulation plan and agreement with the local college so that a student may move on in his/her field without having to repeat what has already been taught them. It is my understanding that this is going to be done.
- There was not enough release time allocated by the funding to complete the necessary evaluation of each other's courses. We need to work on this some more for articulation to be complete.
- Too much free credit may permit unqualified students to skip much needed courses.
- I believe articulation is highly desirable and needed. I am sorry that more progress has not been made by now in our area. It is my hope that more will be accomplished next year.
- Students that had decided not to attend institutions of higher education are now planning to attend Southside Va. Community College this fall. This came about after articulation plan had been expanded and a test administered to 15 students.
- Our department feels that this is a worthwhile endeavor and we look forward to working with the community college.
- By providing a placement program, the secondary as well as postsecondary institutions will be forced to have much better communication.
- It will take a great deal of time to communicate between institutions, areas and levels of proficiency expected of the students. It should allow students to take more electives instead of taking something over.
- Con - painfully slow; pro - seems to be no lose situation; students, secondary programs and community college gain.
- I feel that this will encourage students to a better job since they will not have to repeat certain areas. This will give them a chance to branch out and take other electives.
- Prevents repetition of material in which student is already competent.
- Very few students continue their education to the community college level. In the past 14 years, I can think of only two people who have continued to that level.
- Students might feel more comfortable if they could take the placement test at their own school in the spring.
- Administrators, counselors involved. Enables us to be even more progressive. Prevents duplication by students, motivates students.

Question #8 (cont.)

Public school faculty (cont.)

- I began working with the committee during the fall of 1984 and have not had the opportunity to do any evaluation of the program.
- There is a good working relationship between the drafting departments at Alleghany High School and Dabney Lancaster Community College; articulation has been going on for years but not as an official program title.

Public school administrators

- Informal with John Tyler Community College in technical math. JTCC supplies instructor, Colonial Heights supplies space. Updated course outline, description and CBE materials in summer 1984-85 could lead to 2+2.
- I believe Virginia should take the lead in developing 2+2 high tech programs for small rural school divisions - small schools don't have the funds to employ electronic instructor. The community college could supply the instructor and rotate the individual among small school division. Then follow with 2 years of electronics at local community college.
- I am very pleased and look forward to expanding the articulation.
- The entire idea of articulation is helping kids.
- We look forward to more credit for our program - challenge exams, etc.
- Articulation is a must. Parents should not pay for the same instruction twice so a child can have a community college degree. The instruction in the community college should begin where the student is when he enters.
- The quarter system and public school calendar are problems with articulation. Adjustments can be made but with emphasis on time on task these two systems pose real problems. Emphasis should be placed on how related vocational programs and/or courses can be used in articulation.
- I definitely feel that once per year all teachers and administrators involved in the articulation process should have a full day workshop/rap session.
- Hopefully, articulation will make it easier for the transition of classes from high school to the community college. If the first program works successfully, other programs may be encouraged to follow.
- A bit too soon to evaluate further than above.
- The real benefits from articulation are continuity and sequential teaching of program content between the high schools and community college.
- It appears so simple once the steps have begun that it should positively be done in as many areas as possible.
- Students, according to their individual abilities, will be better served in both the secondary and postsecondary setting.
- This process has been good for the community college and the high school. One hand needs to know what the other is doing.
- We are at the point of involving some teachers and counselors in the articulation process with certain programs. Up to this point, only administrators at the two levels have been involved, which included the signing of an agreement by the superintendents and the community college officials. Our next move will be working with teachers at both levels. Teachers and counselors have not been involved thus far, therefore, they are not prepared to complete the survey at this time.

Question #8 (cont.)

Public school administrators (cont.)

- Additional paperwork for already overtaxed employees.
- The cooperative approach should be pursued relentlessly for the benefit of the students.
- Depends on focus and objective for articulation. Cost of education should allow students to receive credit for comparable courses. Advanced placement in other courses can be considered.
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- Am anxious to proceed into other areas.

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- A great deal of interaction from high school teachers. Enjoyed working with them.
- The results will not be evident for approximately three years - the "bugs" need to be worked out and other refinements need to be made.
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Question #8 (cont.)

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- I think it is a long overdue positive step which should be beneficial to the students.
- The impact of this articulation project will extend beyond the area articulated. Because of this project, we already see a change in relationship and attitude of individuals other than those directly involved with this project.

Community college counselors

- Effective articulation between the community college and the secondary school system serves as an instrument for program development and expansion. Articulation serves as a vehicle to implement a planned process - student is beneficiary.

Phase 4 Obtain final drafts of approved articulation agreement from all projects and other service regions involved in articulation. Review final project submissions and authorize final reimbursement of "mini project" expenditures.

The Vocational Education Articulation Project resulted in the following accomplishments:

1. Developed and distributed secondary/postsecondary vocational program grids for the 23 community college service regions.
2. Conducted 25 articulation workshops, presentations and seminars.
3. Conducted articulation evaluation survey on the 15 "mini projects" involved in the project this year.
4. Developed nine articulation agreements in nine community college service regions.
5. Developed six articulation plans in five community college service regions.
6. At this time all 23 community college service regions are involved in the development of some stage of an articulation agreement.

Survey and Conclusions

The administrators, faculty and counselors involved in the 15 "mini project" service regions were surveyed. The overall response rate was approximately 45 percent. A summary of the results indicated that articulation should be beneficial for the students in that they would be motivated to do better work and better quality students would be attracted to the programs. Cooperation between community college and public school personnel was greatly improved and 89% of the respondents felt articulation should be expanded to include other programs at their institution.

Recommendations for Future Articulation Activities

1. The State Department of Education and the Virginia Community College System should continue to support a state-wide effort to coordinate the articulation of vocational programs.
2. "Mini projects" of $1000 to $1500 each should be established during 1985-86 to allow service regions to continue their efforts to develop and/or expand articulation.
3. The articulation advisory committee should be continued to provide guidance and direction for those working with the 1985-86 "mini projects".
4. The articulation advisory committee should be available to assist the State Board of Education, the State Board of Community Colleges and the State Council of Higher Education in the development of state-wide articulation policy.

4. The following community college service region has developed an articulation plan as a result of participation in this year's articulation project.

   Blue Ridge Community College Service Region

5. The following community college service regions are involved in developing articulation plans as a result of participation in the articulation project.

   Germanna Community College Service Region
   John Tyler Community College Service Region
   Northern Virginia Community College
      Alexandria Campus Service Region
      Woodbridge Campus Service Region
   Patrick Henry Community College Service Region
   Paul D. Camp Community College Service Region

6. The following community college service regions are involved in partial articulation arrangements or in preparing articulation plans without the assistance of the articulation project.

   J. Sargeant Reynolds Community College Service Region
   Mountain Empire Community College Service Region
   Northern Virginia Community College Service Region
   Piedmont Virginia Community College Service Region
   Tidewater Community College Service Region

7. Table 1 provides a summary of the articulation status for each community college service region.

8. Table 2 provides a summary of the programs that have been articulated in each service region.

Evaluation of the Project:

Formal evaluations of the project's activities were not conducted. The meetings, seminars and workshops did not lend themselves to formal evaluation. However, constant feedback from "mini project" heads and participants indicated that the information and assistance provided by the project were most beneficial.

A survey was conducted of public school and community college administrators, faculty and counselors who participated in the 15 "mini projects" awarded by the project this year. In all cases, these institutions were just establishing articulation plans or agreements. Sixty survey instruments were sent to community college personnel and 372 were sent to public school personnel in the 15 community college service regions. The overall response rate was 45 percent with community college and public school response rates being 72 and 40 percent, respectively. In summary, the responses indicated, in public schools, 97 percent and in community colleges, 100 percent feel that articulation will benefit their students, and 89 and 88 percent, respectively, feel that articulation should be expanded to include other programs at their institutions.

The participants also identified ways in which the students and faculty might benefit from articulation. The principal student-related benefits were, "Motivate students to do better quality work" and "Attract better quality students to the program". The highest scored faculty-related benefits included, "Improve communications and cooperation between community college and public school personnel" and "Increased enrollment in my courses and programs". Forty-seven percent of the responding high school instructors indicated articulation would cause them to evaluate their students more closely.

ARTICULATION SURVEY SUMMARY

A. # of community colleges and public schools surveyed

15	Community colleges
93	Public school systems
108	Total

B. # and % of community colleges and public schools returning the survey

#	%	
10	67%	Community colleges
46	49%	Public schools
56	52%	Total return

C. # of survey instruments mailed out

60	Community colleges
372	Public schools
432	Total number of surveys mailed

D. # and % of survey instruments returned

#	%(of total)	
* 43	72%	Community colleges
*150	40%	Public schools
193	45%	Total return

E. Did you participate in the development of the articulation plan/agreement?

	YES			NO		
	# Returned	% of total Return	% of Total	# Returned	% of total Return	% of Total
Public School						
Faculty	67	44%	18%	4	3%	1%
Administrators	61	40%	16%	3	2%	1%
Counselors	8	6%	2%	2	2%	0
Other	1	1%	0	-	-	0
Total	137	90%	37%	12	7%	3%
(1 gave no response)						
Community College						
Faculty	19	44%	31%	1	5%	2%
Administrators	19	44%	31%	-	-	-
Counselors	2	4%	3%	1	33%	2%
Other	1	2%	2%	-	-	-
Total	41	95%	68%	2	3%	3%

F. What positions do the respondents hold at their institutions?

	# Returned	% of total Return	% of Total
Public School			
Faculty	74	49%	20%
Administrators	65	43%	17%
Counselors	10	7%	3%
Other	1	1%	0
Total	80	53%	22%
Community college			
Faculty	20	46%	33%
Administrators	19	44%	31%
Counselors	3	7%	5%
Other	1	2%	1%
Total	43	100%	71%

G. Is articulation beneficial for the students in your institutions?

	YES			NO		
	# Returned	% of Total Return	% of Total	# Returned	% of Total Return	% of Total
Public Schools	147	98%	40%	2	1%	-
Community College	43	100%	71%	-	-	-

H. How will articulation benefit the students?

	Total Return	# This Response	% Return +	% Total ++
1. Produce better quality students.				
Public School				
Faculty	74	36	24%	10%
**Administrators	66	28	19%	7%
Counselors	10	3	5%	1%
Total	150	72	48%	19%
Community College				
Faculty	20	5%	12%	8%
**Administrators	20	10%	23%	16%
Counselors	3	2	5%	3%
Total	43	17	39%	28%

	Total Return	# This Response	% Return +	% Total ++
2. Reduce the time students remain in school.				
Public School				
Faculty	74	37	25%	10%
**Administrators	66	36	24%	10%
Counselors	10	3	2%	1%
Total	150	76	51%	20%
Community College				
Faculty	20	8	18%	13%
Administrators	20	13	30%	22%
Counselors	3	2	5%	3%
Total	43	23	53%	38%
3. Increase the number of students who graduate from your program.				
Public School				
Faculty	74	24	16%	6%
**Administrators	66	20	13%	5%
Counselors	10	4	3%	1%
Total	150	48	32%	13%
Community College				
Faculty	20	10	23%	17%
**Administrators	20	13	30%	22%
Counselors	3	3	7%	5%
Total	43	26	60%	43%
4. Motivate students to do better work.				
Public School				
Faculty	74	73	49%	20%
**Administrators	66	53	35%	14%
Counselors	10	9	6%	2%
Total	150	135	90%	36%
Community College				
Faculty	20	12	28%	20%
**Administrators	20	17	39%	28%
Counselors	3	2	5%	3%
Total	43	31	72%	52%
5. Attract better quality students to your program.				
Public School				
Faculty	74	31	21%	8%
Administrators	66	35	23%	9%
Counselors	10	6	4%	2%
Total	150	72	48%	19%

	Total Return	# This Response	% Return +	% Total ++
5. (cont.)				
Community College				
Faculty	20	11	26%	18%
**Administrators	20	16	37%	27%
Counselors	3	3	7%	5%
Total	43	30	70%	50%

I. How will articulation benefit you (teacher, administrator, counselor) in your work?

1. Improve the quality of instruction.

Public School				
Faculty	74	25	17%	7%
Administrators	66	16	11%	4%
Counselors	10	4	3%	1%
Total	150	45	30%	12%
Community College				
Faculty	20	3	7%	5%
Administrators	20	7	16%	12%
Counselors	3	2	5%	3%
Total	43	12	28%	20%

2. Cause me to evaluate the students more.

Public School				
Faculty	74	42	28%	11%
**Administrators	66	23	15%	6%
Counselors	10	6	4%	2%
Total	150	71	47%	19%
Community College				
Faculty	20	6	14%	10%
**Administrators	20	7	16%	12%
Counselors	3	1	2%	2%
Total	43	14	32%	23%

3. Improve communication with other instructors in my discipline.

Public School				
Faculty	74	42	28%	11%
Administrators	66	25	17%	7%
Counselors	10	3	2%	1%
Total	150	70	47%	19%
Community College				
Faculty	20	19	44%	32%
Administrators	20	14	32%	23%
Counselors	3	2	5%	3%
Total	43	35	81%	58%

	Return	Response	% Return +	% Total ++
4. Improve communication and cooperation between community college and public school personnel.				
Public School				
Faculty	74	71	47%	19%
**Administrators	66	55	37%	15%
Counselors	10	9	6%	2%
Total	150	135	90%	36%
Community College				
Faculty	20	20	46%	33%
**Administrators	20	18	42%	30%
Counselors	3	3	7%	5%
Total	43	41	95%	68%
5. Increase enrollment in my courses and programs.				
Public School				
Faculty	74	16	11%	4%
Administrators	66	11	7%	3%
Counselors	10	3	2%	1%
Total	150	30	20%	8%
Community College				
Faculty	20	13	38%	22%
Administrators	20	12	28%	20%
Counselors	3	3	7%	5%
Total	43	28	65%	47%
6. Improve the quality of students in my courses and programs.				
Public School				
Faculty	74	29	19%	8%
Administrators	66	20	13%	5%
Counselors	10	4	3%	1%
Total	150	53	35%	14%
Community College				
Faculty	20	9	21%	15%
Administrators	20	10	23%	16%
Counselors	3	2	5%	3%
Total	43	21	49%	35%

J. Do you feel that articulation should be expanded to include other programs at your institution?

	YES			NO		
	# Returned	% of total Return +	% of Total ++	# Returned	% of total Return +	% of Total ++
Public School						
Faculty	65	43%	17%	5	3%	1%
**Administrators	57	38%	15%	2	1%	1%
Counselors	10	7%	3%	-	-	-
Total	132	88%	35%	6	4%	2%
Community College						
Faculty	16	37%	27%	2	5%	3%
**Administrators	21	49%	35%	1	2%	2%
Counselors	3	7%	12%	-	-	-
Total	40	93%	67%	3	7%	5%

** Represents combined responses for Administrators and Other categories.

+ Determined as follows: # indicating this response ÷ the total return for public school or community college faculty, administrators or counselors, respectively.

++ Determined as follows: # indicating this response ÷ total public school or community college surveys mailed.

Comments

Question #3

Public school faculty

- It may result in students doing better work.
- Articulation will give some students an incentive to do better work.
- Seems to make good sense
- Competency sheet for classes will be helpful.
- The student will have something to work toward and will know where he will start in drafting at the community college.
- I think it is a great idea for students to be given credit for areas in which they are proficient.
- And in application of processes taught; also in job placement.
- Long overdue.
- Avoid repeating subject matter; save time.

Public school administrators

- Offers more for the students; heightens awareness of past high school educational opportunities.
- Provides career ladder and better education and skilled workers.
- If students are aware of this program, they will seek to do better quality work. (2)
- By encouraging high school students to get a more advanced degree.
- It has been too long in coming.
- A necessary step.
- Not involved in program.
- Less overlap in curriculum.

Public school counselor

- The development of the plan is beneficial in providing advanced placement for students having a thorough foundation in a particular area.

Community college faculty

- About time.
- Prevents duplication of already learned material.

Question #4

Public school faculty

- I don't teach those programs.

Question #5

Public school faculty

- Reduce instructional repetition. (2)

Question #5 (cont.)

Public school administrators

- Advanced placement; lack of duplication; economical; allow for more efficient instruction.
- Articulation should keep the student from repeating competencies he/she has already mastered.
- Not have the college "turn off" high school completers by requiring students to repeat work.
- Course work will be less repetitious.
- Motivate students to complete program.
- Educational opportunity beyond high school.
- Gives recognition to the secondary program in the eyes of administrators and counselors, etc. by providing college credit for the high school student.
- Students will appreciate cooperation between secondary school and the community college.
- Allow transferable credit for two courses between two schools - Fundamentals of Nursing I & II.

Public school counselors

- Will encourage students to attend the community college.
- Give more students conscious options in varied fields.

Community college administrators

- Will provide a continual sequence of courses to accomplish a 2 plus 2 program.

Community college counselors

- Attract more students.

Question #6

Public school faculty

- Articulation will also improve the image of the program and improve prestige.

Public school administrators

- I believe all of these factors will be true for the teachers of these courses.
- Articulation is no big deal.
- Agree with all from an administrative point of view.
- Provide better educational opportunities for students at more economical rates.
- This is not to say that communications are presently bad - only one meeting with the community college - we are just beginning.
- Gives me opportunity to have first hand knowledge of the community college.

Question #7

Public school administrators

- Only where appropriate.
- Specific vocational programs have not been designated for articulation in our school division.

Community college counselors

- Will improve placement in program and give student services personnel more information and strategies with which to recruit.

Question #8

Public school faculty

- All vocational areas need to develop an articulation plan and agreement with the local college so that a student may move on in his/her field without having to repeat what has already been taught them. It is my understanding that this is going to be done.
- There was not enough release time allocated by the funding to complete the necessary evaluation of each other's courses. We need to work on this some more for articulation to be complete.
- Too much free credit may permit unqualified students to skip much needed courses.
- I believe articulation is highly desirable and needed. I am sorry that more progress has not been made by now in our area. It is my hope that more will be accomplished next year.
- Students that had decided not to attend institutions of higher education are now planning to attend Southside Va. Community College this fall. This came about after articulation plan had been expanded and a test administered to 15 students.
- Our department feels that this is a worthwhile endeavor and we look forward to working with the community college.
- By providing a placement program, the secondary as well as postsecondary institutions will be forced to have much better communication.
- It will take a great deal of time to communicate between institutions, areas and levels of proficiency expected of the students. It should allow students to take more electives instead of taking something over.
- Con - painfully slow; pro - seems to be no lose situation; students, secondary programs and community college gain.
- I feel that this will encourage students to a better job since they will not have to repeat certain areas. This will give them a chance to branch out and take other electives.
- Prevents repetition of material in which student is already competent.
- Very few students continue their education to the community college level. In the past 14 years, I can think of only two people who have continued to that level.
- Students might feel more comfortable if they could take the placement test at their own school in the spring.
- Administrators, counselors involved. Enables us to be even more progressive. Prevents duplication by students, motivates students.

Question #8 (cont.)

Public school faculty (cont.)

- I began working with the committee during the fall of 1984 and have not had the opportunity to do any evaluation of the program.
- There is a good working relationship between the drafting departments at Alleghany High School and Dabney Lancaster Community College; articulation has been going on for years but not as an official program title.

Public school administrators

- Informal with John Tyler Community College in technical math. JTCC supplies instructor, Colonial Heights supplies space. Updated course outline, description and CBE materials in summer 1984-85 could lead to 2+2.
- I believe Virginia should take the lead in developing 2+2 high tech programs for small rural school divisions - small schools don't have the funds to employ electronic instructor. The community college could supply the instructor and rotate the individual among small school division. Then follow with 2 years of electronics at local community college.
- I am very pleased and look forward to expanding the articulation.
- The entire idea of articulation is helping kids.
- We look forward to more credit for our program - challenge exams, etc.
- Articulation is a must. Parents should not pay for the same instruction twice so a child can have a community college degree. The instruction in the community college should begin where the student is when he enters.
- The quarter system and public school calendar are problems with articulation. Adjustments can be made but with emphasis on time on task these two systems pose real problems. Emphasis should be placed on how related vocational programs and/or courses can be used in articulation.
- I definitely feel that once per year all teachers and administrators involved in the articulation process should have a full day workshop/rap session.
- Hopefully, articulation will make it easier for the transition of classes from high school to the community college. If the first program works successfully, other programs may be encouraged to follow.
- A bit too soon to evaluate further than above.
- The real benefits from articulation are continuity and sequential teaching of program content between the high schools and community college.
- It appears so simple once the steps have begun that it should positively be done in as many areas as possible.
- Students, according to their individual abilities, will be better served in both the secondary and postsecondary setting.
- This process has been good for the community college and the high school. One hand needs to know what the other is doing.
- We are at the point of involving some teachers and counselors in the articulation process with certain programs. Up to this point, only administrators at the two levels have been involved, which included the signing of an agreement by the superintendents and the community college officials. Our next move will be working with teachers at both levels. Teachers and counselors have not been involved thus far, therefore, they are not prepared to complete the survey at this time.

Question #8 (cont.)

Public school administrators (cont.)

- Additional paperwork for already overtaxed employees.
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- Depends on focus and objective for articulation. Cost of education should allow students to receive credit for comparable courses. Advanced placement in other courses can be considered.
- Articulation only works if both sides are cooperative and have the time to develop the agreements. Also, the people involved must have the authority to make the decisions necessary.
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ARTICULATION OF VOCATIONAL PROGRAMS

SECONDARY/POSTSECONDARY HANDBOOK

Vocational Education Articulation Project
Division of Vocational Research & Adult Services
Department of Education
Commonwealth of Virginia
Richmond, Virginia 23216

November 1983

ARTICULATION

OF

VOCATIONAL PROGRAMS

Secondary/Postsecondary

Handbook

by

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This secondary/postsecondary handbook to articulation was developed for the Virginia Department of Education, Division of Vocational Research and Adult Services, under the provisions of the Vocational Education Articulation Project Grant # VA-83-C-131-2-AD-001 awarded to the Division of Vocational and Technical Education, Virginia Tech, Blacksburg, Virginia 24061.

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FOREWORD

If vocational programs are going to be articulated and curricula coordinated in Virginia, it is evident that educators must develop a stronger commitment to work together than presently exists. Although legislators have been concerned over duplication of effort and redundance in time and cost to students during the past decade, educators apparently do not share this concern. Most educators are eager to request more funds for vocational programs but reluctant to admit that increased cooperation might produce more efficient programs. The opportunity for students to develop a career ladder in technical occupations has been sporadic.

The major purpose of this Handbook is to motivate vocational educators at the secondary and post-secondary levels to become committed to the articulation movement. In addition, this publication should serve as a manual for evaluating each community to determine which factors are restricting coordination of vocational programs and to serve as a planning manual to foster desirable change.

This Handbook was planned to be useful to educational practitioners who are looking for strategies to solve problems and not theories to confuse the issues. I hope it turned out to be that type of publication.

Charles Curry

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ARTICULATION OF

SECONDARY AND POST-SECONDARY PROGRAMS

INTRODUCTION

Secondary post-secondary articulation between the community colleges and the secondary schools of their service regions has been in effect for a long time without formal articulation agreements. This informal articulation, or granting of post-secondary credit for accomplishments at the secondary level, has been accomplished in many ways: by formal testing administered by the community college, by informal teacher-to-teacher discussions where student capabilities are established and by informal testing by community college teachers. These informal procedures are certainly beneficial to the students who are afforded them, but they are often not available to all students that might use them. In addition, except for "challenge" testing, these procedures do not guarantee advanced standing for either a course or portions of a course. Hence, many students at a community college may repeat instruction provided at the secondary level.

The need for formal articulation in vocational programs was recognized in the FY 1979 State Plan for Vocational Education and a joint Department of Education - Community College System research project was established to develop a model for formal articulation procedures (Appendix 1). To implement this plan, four articulation projects were established; one at each of the Central Virginia, Thomas Nelson and Southwest Virginia Community colleges, and one at James Madison University which included Blue Ridge, Lord Fairfax and Dabney S. Lancaster Community colleges. These projects had the goal of establishing articulation procedures based on competency-based education materials. This handbook was developed as a result of the PAVE project at James Madison University.

The purpose of the Vocational Education Articulation Project is to introduce and initiate the development of formal articulation agreements between vocational programs at the remaining secondary schools and community colleges in Virginia. It will accomplish this purpose by providing information and technical assistance in the form of presentations, workshops, handbooks and consultation with interested community colleges and public school systems.

Most of the formal articulation agreements in Virginia have been established using a foundation of Competency-Based Education (CBE). Although CBE is not essential, it is an invaluable tool that facilitates the development of the articulation agreement. The terms "articulation" and "competency-based education" as used in Virginia have very specific definitions. These definitions are as follows:

ARTICULATION: "A planned process within an educational system that coordinates instructional programs which will enable students to move from one institutional level to another, or from one institution to another at the same instructional level, without unnecessary duplication or gaps in the instructional program."

COMPETENCY-BASED EDUCATION: "Educational programs in which required knowledge, skills and attitudes are based on role-relevant competencies with specific standards."

These definitions as well as others associated with competency-based education can be found in Appendix A. A bibliography of articulation literature is in Appendix K.

Examples of articulation between secondary schools and community colleges vary considerably. At one extreme articulation involves extensive cooperation including not only educational programs but also guidance,

placement and student follow-up services, data processing and student records, joint planning, and shared faculty and facilities. At the other extreme articulation may only involve one or two programs and a few courses that one institution agrees to accept from another. There is no one best way to establish articulation. Therefore, each community college and the public schools of its service region will ultimately develop an articulation agreement that is suitable to their specific needs. A map indicating the locations of Virginia's community colleges, their service regions and their addresses and telephone numbers is provided in Appendix B.

FACTORS LIMITING ARTICULATION OF VOCATIONAL EDUCATION

This section presents problems which have been identified as limiting factors for implementing coordinated vocational programs which span secondary and post-secondary education delivering agencies. The problems presented here are not all inclusive and all are not encountered in every region. They are, however, problems that are prevalent within and between both secondary and post-secondary institutions. These are the types of problems that discourage students from establishing a career plan which includes vocational instruction at various levels.

The following factors are limiting articulation of vocational education programs:

FACTOR #1 - CONFLICTING PHILOSOPHIES

FACTOR #2 - ABSENCE OF COMMUNICATION

FACTOR #3 - THE PREVALENCE OF TURF PROTECTION

FACTOR #4 - LACK OF MUTUAL TRUST

FACTOR #5 - LACK OF COMMITMENT

FACTOR #1 - CONFLICTING PHILOSOPHIES

Although there is consistency within the mission of vocational education at the secondary and post-secondary levels, there are some inconsistencies in the philosophy for carrying out this mission. Some instructors and administrators feel that curriculum content should be determined strictly by educators. Other individuals believe that employers should be involved in determining curriculum content.

Another philosophical difference deals with the student population that each level will serve. Some educators feel that there should be a flow-through of students from secondary to post-secondary programs, thus making it possible for students to develop a career ladder by combining instruction at both levels. Others feel that the community colleges should serve a separate student population and that there is evidence of duplication of instruction only when students do flow through from secondary to post-secondary programs.

Apparently, there is a belief that articulation with a higher level of instruction is desirable for the institution and improves its status. Likewise, articulation with a lower level appears to trigger a negative reaction and alert defense mechanisms. Others feel that it is equally desirable to articulate with delivery agencies at both ends of the spectrum. Some see the need to articulate both vertically and horizontally, while others see the articulation effort only as an attempt to establish coordination of programs between various instructional levels.

These are the types of philosophical differences that hamper articulation efforts. Before it is possible to implement articulation strategies between programs, a consistent philosophy will need to be developed.

FACTOR #2 - ABSENCE OF COMMUNICATION

Communication between institutions affects the operation and development of educational programs. The absence of communication may be identified in several degrees. First, there is total absence of communication where instructors in related fields never contact each other or administrators of vocational programs for different agencies never contact each other. This type of communication void is prevalent in many communities.

The second type of communication problem results from artificial communication. A dinner meeting or reception held occasionally to establish contacts between teachers or administrators at different levels may facilitate some communication. In some cases, a joint coordinating committee has been established to facilitate some communication but in most cases, the committees foster only a minimal amount of communication.

A third type of communication that often exists is informal communication. The instructors in related fields may contact each other informally or socially. Administrators, likewise, may know who their counterparts in other agencies are but there is an absence of structured, purposeful communication. Because of the absence of communication among instructors, administrators and governing bodies, secondary and post-secondary school representatives are not knowledgeable of what other schools are striving to accomplish. This lack of communication is the key factor limiting articulation of vocational programs.

FACTOR #3 - THE PREVALENCE OF TURF PROTECTION

One of the most prevalent factors limiting the articulation process is the presence of the redundant educational phenomenon called "turf protection." People who subscribe to the "turf protection" philosophy believe that educational agencies are competitive establishments rather than public service organizations. They fear that some other agency will provide a higher quality program, recruit students away from their programs or make their programs become dispensable. Attempting to implement articulation strategies while being overly concerned about one's "turf" will be more likely to retard articulation progress than to foster it.

FACTOR #4 - LACK OF MUTUAL TRUST

Another problem which limits progress to articulate secondary and post-secondary programs is a lack of trust and credibility that personnel at one level have for personnel at other levels. Often, instructors not only fail to trust instructors at other levels, but they may also discourage students from continuing their education in certain programs.

Administrators and instructors at the post-secondary level are skeptical about accepting students at an advanced level and providing academic credit

for work completed at a lower level because they feel that the work is not of the same caliber. This lack of trust can only be treated by becoming familiar with related programs at other levels and working together to assure that knowledge and skills developed do meet criterion marketable in the world of work.

FACTOR #5 - LACK OF COMMITMENT

Throughout the history of public education, many different theories regarding how to improve programs have become popular, faded away, and sometimes returned to popularity again. The frequency of this phenomenon in education has caused many educators to label these issues as fads that will pass without making much positive contribution. Articulation of vocational programs has been given this type of label by many educational practitioners.

Individuals who predict this type of future for the articulation movement are not willing to devote much time and effort to it. In the daily operation of any educational institution, there are many more immediate problems that must be dealt with to assure the smooth operation of the instructional program. In order to facilitate coordination of vocational programs at different levels and within discipline areas, a greater commitment must exist between secondary and post-secondary administrators and instructors.

EXISTING SITUATIONS REGARDING ARTICULATION

This section describes the status quo with regard to articulation in vocational programs between many secondary and post-secondary schools. Conflicting philosophies, poor communication, turf protection and negative attitudes toward programs at other levels have resulted in the following existing situations:

SITUATION #1 - LACK OF STUDENT FLOW-THROUGH

SITUATION #2 - INCOMPATIBLE STUDENT EVALUATION AND DOCUMENTATION SYSTEMS

SITUATION #3 - UNCOORDINATED STUDENT SERVICES

SITUATION #4 - LACK OF PROGRAM PLANNING TO MEET COMMUNITY NEEDS

SITUATION #5 - LACK OF COORDINATED CURRICULA

SITUATION #6 - INEFFICIENT USE OF FACILITIES AND STAFF

SITUATION #7 - UNCOORDINATED CONTINUING EDUCATION PROGRAMS

SITUATION #8 - LACK OF COORDINATED PUBLIC INFORMATION PROGRAMS

SITUATION #9 - LACK OF PUBLIC CREDIBILITY FOR PROGRAMS

SITUATION #1 - LACK OF STUDENT FLOW-THROUGH

Only a small number of students complete vocational programs and continue their education in a related post-secondary program. In a recent study conducted by project PAVE in which the secondary records of students in four disciplines of three community colleges were reviewed, less than 7.5 percent had completed related secondary programs. Apparently, most vocational educators, guidance counselors, parents and students perceive secondary and post-secondary vocational programs as terminal job preparation programs. Since the programs have not been coordinated to facilitate career ladder development, there is a very definite lack of student flow-through within related vocational programs between different instructional levels.

SITUATION #2 - INCOMPATIBLE STUDENT EVALUATION AND DOCUMENTATION SYSTEMS ARE USED

Existing student evaluation systems developed by each individual educational agency have their own unique characteristics. There are point systems, numerical grades, letter grades, symbols, checklists and student profiles. Often, the same vocational course completed in one secondary school may be recorded as a different course by another secondary school. The existing permanent records for each student in most high schools are inadequate documentation of vocational program achievement to allow for

transfer of credit. Sometimes, copies of the permanent records supplied to post-secondary institutions are so illegible that one can only guess what courses the student has completed. Apparently, there is a lack of respect by guidance and counseling personnel for documenting vocational program completion since vocation courses are elective credit and not required for graduation. A consistent method of task level documentation is essential to enhance articulation procedures.

SITUATION #3 - UNCOORDINATED STUDENT SERVICES

Organized career counseling should begin in the elementary school and continue throughout the student's acquisition of occupational skills. At various points throughout an educational program, students need professional guidance and counseling. Many students need assistance in clarifying career goals while other students may need assistance in identifying programs to meet their career goals. Others need help in making personal adjustments or in meeting the financial obligations necessary to obtain vocational training.

Counselor-to-student ratios are too high in most situations to allow for effective career and personal counseling. Career planning should be the result of one-to-one counselor-student conferences. A realistic counselor-to-student ratio would be one counselor for 150 students.

Some activities such as career days, financial aid meetings, and orientation tours are often coordinated between secondary and post-secondary counselors. These are informative activities that provide students with background information for making decisions. Most students need assistance on an individual basis to use the knowledge gained from such activities.

SITUATION #4 - LACK OF COORDINATED PLANNING TO MEET COMMUNITY NEEDS

Vocational administrators on both the secondary and post-secondary levels have established methods of planning to meet community needs. Each local school division and community college develops an annual plan. Preparation for the planning document includes community surveys, student follow-up and input from business and industry representatives. Some effort has been made to utilize the same advisory committee members on both secondary and post-secondary committees to provide some coordination.

Regional plans for vocational education which are coordinated to provide sequential and continuous programs have not been developed in most community college regions. Data collection, which is necessary for program planning and federal reporting, is not consistent at both levels and, therefore, caution must be used in comparing and utilizing available data for decision-making.

Local secondary school divisions use a standardized planning document format which is provided by the Division of Vocational Education of the State Department of Education. Each community college submits to the Virginia Community College System a program plan which generally follows the format used by four-year colleges and universities. Data used to plan for post-secondary vocational programs in the State Plan for Vocational

Education is collected from individual community college plans. Since there is not a standard format for the post-secondary vocational plans of community colleges, information is not always available in a usable form.

SITUATION #5 - LACK OF COORDINATED CURRICULA

Since very few students completing secondary vocational programs have elected to continue their career development in related community college programs, coordinated curricula between these two levels has not been essential. In the future, with the increased emphasis on articulation of vocational programs at various levels, a coordinated curricula becomes most important.

In order to coordinate the curricula so that students in the same program at different institutions develop the same skills, all instructors within a community college region must work together to organize and sequentialize the content. Students transferring from one secondary school to another at the same level or transferring credit from secondary to post-secondary institutions should have mastered similar content. A record of the specific skills developed should be transferred with the student.

Presently, each vocational instructor plans curriculum based on their experience and expertise with various resources such as state curriculum guides and with the advice of their occupational advisory committee. The effectiveness of this process for planning vocational curriculum has diminished.

SITUATION #6 - INEFFICIENT USE OF FACILITIES AND STAFF

Students enrolled in vocational programs deserve to be provided the best facilities and instructors available. Courses taken to complete a program or continuing education courses may be improved by utilizing personnel or facilities at other vocational institutions within a community. Other than an occasional instructor who may teach a course for another school division or community college, very little sharing of facilities and faculty has been identified.

SITUATION #7 - UNCOORDINATED CONTINUING EDUCATION PROGRAMS

In most cases, continuing education courses or adult night classes, as they are often called, are operated independently by the secondary or post-secondary sponsoring agency. Attempts to establish adult education coordinating committees have not proven successful in many areas. Courses that are scheduled sometimes duplicate other courses and often foster unhealthy competition between schools for students.

Joint planning for continuing education courses is necessary to assure that the community's needs are met and inter-school relationships are positive. Deciding which institution will offer a course is not difficult if approached in an organized, formal manner.

SITUATION #8 - LACK OF COORDINATED PUBLIC INFORMATION PROGRAMS

Most educational agencies develop an organized public information program which provides information on programs offered, special services, school growth and student activities. One of the goals of such a public information program is usually student recruitment. When a continuous sequential curriculum is implemented which spans the secondary and post-secondary schools, joint brochures, audio-visual programs and news articles should be developed. Such informative activities which promote occupational programs rather than educational institutions are usually more effective recruitment tools.

Presently, very few publications of this type exist, primarily because the career ladder concept has not been promoted in vocational education. Before this type of program can be used successfully, the curriculum must be articulated and credit transfer or advanced placement policies developed.

SITUATION #9 - LACK OF PUBLIC CREDIBILITY FOR PROGRAMS

During this era of close scrutiny, all public agencies are subject to public criticism for inefficient use of tax dollars. This criticism is often based on lack of knowledge concerning actual cost of operating educational programs. The lack of coordination of vocational programs which results in duplication or instructional gaps within and between educational levels is a legitimate concern which demands immediate attention. Public concern over the job relevancy of skills being taught in vocational programs and the lack of coordination between instructional levels is in the infant stage. It behooves all vocational educators to address this issue before it becomes a dominant negative issue and effects public support for vocational programs.

STRATEGIES FOR ARTICULATING SECONDARY AND POST-SECONDARY VOCATIONAL PROGRAMS

The strategies outlined in this section are designed to address the factors limiting articulation within and between vocational programs. The result of implementing these strategies should change the existing situation described in the preceding section. It is not anticipated that all strategies will be implemented in each community college region but the more strategies implemented should result in more student flow-through.

STRATEGY #1 - ESTABLISH THE ARTICULATION OF VOCATIONAL PROGRAMS AS A HIGH PRIORITY

STRATEGY #2 - ESTABLISH A FORMAL COMMUNICATION STRUCTURE

STRATEGY #3 - DEVELOP AN ARTICULATION PLAN FOR INSTITUTIONAL REGION

STRATEGY #4 - DEVELOP A COORDINATED SEQUENTIAL CURRICULUM

STRATEGY #5 - DEVELOP A CONSISTENT STUDENT EVALUATION AND RECORDKEEPING SYSTEM

STRATEGY #6 - INSTITUTE FORMAL ARTICULATION AGREEMENTS

STRATEGY #7 - ESTABLISH A COORDINATED CONTINUING EDUCATION PROGRAM

STRATEGY #8 - DEVELOP JOINT RECRUITMENT ACTIVITIES FOR RELATED PROGRAMS

STRATEGY #9 - DEVELOP A PROCEDURE FOR JOINT UTILIZATION OF STAFF, FACILITIES AND EQUIPMENT

STRATEGY #10- ESTABLISH A JOINT COMMUNIQUE TO THE PUBLIC

STRATEGY #11- ESTABLISH COORDINATED STUDENT SERVICES

STRATEGY #1 - ESTABLISH THE ARTICULATION OF VOCATIONAL PROGRAMS AS A HIGH PRIORITY

The first step in articulating vocational programs within a community college region is to establish the degree of importance to be assigned to the effort. Community college presidents and local school superintendents who wish to promote coordination within and between vocational programs may provide the impetus for constructive change. After reviewing the factors which limit articulation and the existing situations presented in this handbook, the chief school administrator in each community college region should identify those that are apropos to their community college region.

An articulation "state of the art" report should then be presented to the local governing board. Following the report, a recommendation that a

resolution be adopted by the Board which establishes the Board's official position regarding articulation of vocational programs would be appropriate. (A suggested resolution and cover letter are included in Appendix C.)

After the resolution is adopted (assuming it is of a positive nature), copies of the resolution should be sent to each Division Superintendent of Schools in the community college region. The community college president and each division superintendent should appoint an individual to serve on an articulation committee. This committee should be given the task of developing an articulation plan for the community college region that would be presented to all governing boards for approval. If board members express concern over any part of the plan, these problems should be negotiated by the chief school administrators until all boards approve the plan.

The articulation committee should then be assigned the task of implementing the plan and reporting periodically to their local governing boards until vocational programs are fully articulated.

STEPS TO:

ESTABLISH ARTICULATION OF VOCATIONAL PROGRAMS
AS A HIGH PRIORITY

PERSON RESPONSIBLE	TASK
STEP #1 - Community College President	REVIEW FACTORS WHICH LIMIT ARTICU-ARTICULATION AND EXISTING SITUATIONS PRESENTED IN THIS HANDBOOK
STEP #2 - Community College President	IDENTIFY FACTORS WHICH LIMIT ARTICULATION AND EXISTING SITUATIONS WHICH ARE APROPOS TO COMMUNITY COLLEGE REGION
STEP #3 - Community College President	PRESENT A "STATE OF THE ART" REPORT TO LOCAL COMMUNITY COLLEGE BOARD
STEP #4 - Community College President	RECOMMEND A RESOLUTION TO LOCAL COMMUNITY COLLEGE BOARD THAT ESTABLISHES THE OFFICIAL POSITION REGARDING ARTICULATION OF VOCATIONAL PROGRAMS
STEP #5 - Community College President	SEND COPIES OF RESOLUTION AND LETTER TO EACH LOCAL DIVISION SUPERINTENDENT OF SCHOOLS
STEP #6 - Community College President Division Superintendent of Schools	APPOINT AN INDIVIDUAL TO SERVE ON AN ARTICULATION COMMITTEE

STEP #7 -	Articulation Committee	DEVELOP AN ARTICULATION PLAN
STEP #8 -	Local Community College Board Local School Division Board	APPROVE ARTICULATION PLAN FOR COMMUNITY COLLEGE REGION
STEP #9 -	Articulation Committee	IMPLEMENT ARTICULATION PLAN
STEP #10-	Articulation Committee	REPORT PROGRESS TO LOCAL GOVERNING BOARDS

STRATEGY #2 - ESTABLISH A FORMAL COMMUNICATION STRUCTURE

Effective communication is a key factor in improving the coordination between vocational programs at different levels and within vocational programs at the same level. Good communications foster healthy relationships, cooperation and mutual trust. These characteristics provide the foundation on which to build an articulated curriculum that spans individual programs to provide the ultimate educational opportunity for students.

A formal structure should be established to insure that individuals who have different responsibilities within the organizational structure have the information necessary for responsible decision-making. The chief administrative officer within the educational agency should explain to the governing board the need for attention to curriculum coordination in order that students may be served more effectively. Governing boards have the responsibility to consider the information provided them and make policy decisions that affect program articulation.

Community college presidents and division superintendents should maintain informal communications on a routine basis in conducting normal administrative responsibilities. During the development and implementation of articulation strategies, formal meetings within each community college region are necessary in order that consistent leadership and direction may be provided to articulation committees and governing boards. The community college president normally takes the initiative in scheduling these meetings and establishing this aspect of the communicative structure.

Articulation committees (often called steering committees), once established and assigned the task of developing an articulation plan to recommend to each governing board, are the key group who will determine the destiny of the articulation effort. This committee should organize and select a chairperson and recorder. Members of this committee should be expected to present the articulation plan to their governing boards for approval and periodically (at least twice each year) report on progress being made to implement the plan.

Once programs to be articulated have been identified, a Program Coordinating Committee should be established to implement the articulation strategies for that program. In most cases, all persons providing directly related instruction at all levels within the community college region should be members of this committee. Each coordinating committee must also

organize and select a chairperson and recorder. At least one member of the articulation committee should serve as an ex officio member of each coordinating committee to provide a channel of communication between the two groups. Program coordinating committees should be given the opportunity to review and react to strategies in the articulation plan before it has been approved by the governing board, since the coordinating committee is responsible to implement the plan.

Each program coordinating committee should establish a Joint Program Advisory Council made up of employers who are expected to hire students completing the program and incumbent workers in the program area. This advisory council should organize and select a chairperson and recorder. Although it will be necessary for this group to meet more often during the initial stages of implementation, two meetings per year would be adequate after coordinated programs are developed. One meeting should be held in the fall to review plans and objectives for the year and react to curriculum changes. A second meeting in the spring to review progress and assist with student placement would be necessary. It is anticipated that this joint program advisory council would replace individual school craft and program area advisory groups.

The chairperson of each program area advisory council should serve on a Joint General Vocational Advisory Council. This general advisory group should meet following program area advisory council meetings to coordinate reactions and recommendations of each individual council. It is anticipated that this joint general advisory council would replace the individual agency general advisory councils. They would provide input for vocational plans and recommend changes in the overall administration of vocational programs.

The importance of keeping the pupil services personnel informed and receiving their input should not be underestimated. Nearly every strategy for implementing an articulated vocational program will affect the duties of guidance counselors, placement directors and admissions officers. A Joint Pupil Services Planning Group should be established with representatives from each educational agency. This group should communicate with the general vocational advisory council and the articulation committee.

This articulated communication structure should not add additional meetings and bureaucratic structure to the administration of vocational programs. Instead it should reduce the number of routine meetings and provide more valid and useful input from the occupational marketplace. As in any organization undergoing change, a period of frustration may be experienced during the transition period. A sample communication structure is provided in Appendix D.

STRATEGY #3 - DEVELOP AN ARTICULATION PLAN FOR AN INSTITUTIONAL REGION

Under the leadership of the chairperson, the articulation committee will analyze the existing situation, establish goals, identify strategies and provide leadership and coordination to implement these strategies.

(This procedure sounds like the usual educational rhetoric but it should be noted that it only becomes such when the plan is developed but not used as intended.) The primary purpose of an articulation plan is to commit to written form what is going to be done, who is going to do it and when it will be completed. This plan should be brief, to the point and constructed like a simple recipe. Sections of this handbook may be used as a guide to construct an articulation plan. (Sample plan format is in Appendix E.)

STEPS TO:
DEVELOP AND IMPLEMENT AN ARTICULATION PLAN

STEPS	PROCEDURE	DATE COMPLETED
STEP #1 - List existing situations that the plan should address.	Review and discuss the existing situations in Section II of this handbook and record those that apply to the community college region. List other situations that might concern the committee.	_____
STEP #2 - Establish a priority order for vocational programs to be articulated.	Identify related vocational programs at secondary and post-secondary levels. Rank these programs in priority order for articulation. Assign a year that articulation is expected to be implemented in each vocational program.	_____
STEP #3 - Write an improvement objective for each existing situation where change is desired.	Consider each situation individually and construct one improvement objective for each situation.	_____
STEP #4 - Write strategies to address each objective identified.	A brainstorming session may be most effective to identify strategies for each objective. Many objectives will address more than one objective but they should only be recorded once. Record all ideas generated and then list them with the most appropriate objective.	_____
STEP #5 - Assign an individual or group to work on each strategy.	Consider all human resources available and select the individual or group best suited to implement the strategy.	_____

STEP #6 - Schedule an expected completion date.	Establish a priority order for implementation of each strategy and record a realistic date for completion of each strategy.	_____
STEP #7 - Establish and include a formal communication structure in the plan.	Either use the sample communication structure in this handbook or develop one for the community college region. Attach this communication structure to the plan.	_____
STEP #8 - Submit the plan for approval.	Submit the plan to the Community College Board for approval. After approved by the Community College Board, submit the plan to each participating local school board for approval.	_____
STEP #9 - Activate the work groups and individuals responsible for implementing the strategies.	The articulation committee under the direction of the chairperson should organize program coordinating committees, establish meeting schedules, secure resource persons, plan inservice activities, and otherwise see that the persons responsible implement the strategies.	_____
STEP #10 - Report progress to governing bodies.	At least twice each year, a progress report should be made by each articulation committee member to their respective Boards.	_____
STEP #11 - Recommend policy changes and official documents approved by the governing bodies.	As articulation agreements, admission policies, student records, and other documents are developed, they must be presented to the respective governing bodies for approval.	_____
STEP #12 - Evaluate and up-date plan.	The articulation plan should be evaluated annually, as a result of student follow-up; and instructor, administrative and advisory council concerns.	_____

STRATEGY #4 - DEVELOP A COORDINATED SEQUENTIAL CURRICULA

Although there are several different methods that might be used to articulate the curriculum content within a vocational program, it is recommended that a Competency-Based Vocational Education (CBVE) model be used. Application of the CBVE model to the existing curriculum will provide the necessary structure for coordination and sequencing of instruction without unnecessary change or disruption of the entire program. (Appendix F-CBVE model)

In Virginia, the State Plan for Vocational Education contains the following objective:

> "By June 30, 1982, each school division shall have implemented competency-based instruction in approved vocational education programs based on V-TECS and IDECC catalogs, if available, or other competency-based materials as reported by the Virginia Community College System."

Full implementation of competency-based vocational education is expected in September 1984. Since the state has established this objective and since the CBVE model for curriculum development is applicable for coordinating curriculum at various levels, it is one of the most useful approaches for sequencing curriculum. The following standards have been established for evaluating CBVE programs in Virginia.

1 - Competencies or skills that are relevant for employment in a specific occupational area are identified and stated so that mastery of the skill may be determined.

2 - Students are informed of the competencies required for completion of the program or course prior to instruction.

3 - Student performance is measured against predetermined standards rather than against the other students' accomplishments.

4 - A system for recording the competencies achieved by each student is established to provide documentation of each student's performance.

STRATEGY #5 - DEVELOP A CONSISTENT STUDENT EVALUATION AND RECORD-KEEPING SYSTEM

In order to evaluate student performance within a program area and to maintain an accurate record of skill development, a uniform system of documentation is desirable. If the same type of grading system is not used at different schools, then a method of interpolation may be developed to transfer evaluations from one institution to another.

It is recommended that a uniform system of student evaluation be used at each school providing courses within a vocational program. When students transfer from one secondary school to another or from a secondary to a post-secondary school, their competency record could then be used at the new school to place a student in the program. (Appendix G contains 10 examples of competency reports.)

The following are practices for developing a grading system that should be considered when articulating programs:

1 - Students should be graded on their own level of achievement of the predetermined standard and not in relation to how well other individuals achieve.

2 - The minimal acceptable level of achievement should be based on the required entry level in the business or industry.

3 - The grading system should be based on non-punitive strategies. Grades for competencies achieved should not be lowered by competencies not achieved.

4 - The system should provide recognition for achievement beyond the minimal level.

5 - Both secondary and post-secondary faculty must agree on the same criteria or standard to be achieved for each competency.

6 - The evaluation system (grade, points, number, symbol, etc.) will relate the degree to which the standard criteria for each competency has been achieved.

7 - Students should be evaluated on affective, cognitive and psychomotor competencies. Usually three separate lists of competencies are used for the three domains. The grading composition; i.e., percentage for affective (attendance, attitude, work values), cognitive (knowledge) and psychomotor (manipulative) skills must be agreed on by both secondary and post-secondary faculty.

8 - It is recommended that a 0 - 4 point system be used for all competency-based courses.

9 - Letter grades may be used to indicate the percentage of achievement in a content area.

10 - The date should always be recorded when a competency is completed.

In order to maintain a record of the student's competency, a systematic procedure should be established for making a permanent record of performance achieved on each competency. The following practices should be considered when planning a recording system:

1 - A common recording system should be used at both the secondary and post-secondary levels.

2 - The recording document should be an official school record and part of the student's permanent record.

3 - The record should contain a listing of all terminal competencies in the occupational program.

4 - The record should have an evaluation column beside each competency for each major grading period to indicate the level of mastery.

5 - When a student completes a program that merits a certificate, the achievement level should be documented on the certificate.

6 - The permanent student competency record should include the following information: (1) vocational program; (2) competency list (including cognitive, affective and manipulative skills); (3) signatures of student, instructor(s) and school official(s); and (4) official school seal.

These practices for developing a consistent student evaluation and recordkeeping system are provided to facilitate the process. Consideration must be given to local recordkeeping and student recording systems already being used. It should be realized, however, that some change must be made in order to implement a competency-based, vocational recordkeeping system that will meet the needs of an articulated program.

STRATEGY #6 - INSTITUTE FORMAL ARTICULATION AGREEMENTS

An articulation agreement is a formal contract between two educational agencies that relates their commitment to students who continue their vocational program at the post-secondary level. The purpose of such an agreement is to establish a procedure that enables vocational students at the post-secondary level to obtain college credit for specific competencies achieved at the secondary level. (Appendix H - Three Sample Articulation Agreements)

The articulation agreement relates official policy concerning transfer of credit, advance placement or placement by examination. Vocational programs may be coordinated in several stages as a coordinated and standardized curriculum is developed. The degree to which the secondary and post-secondary curricula have been coordinated and the degree to which standard measures are used at both levels for each objective will dictate the extent to which a program may be articulated.

The following steps may be used as guides to develop articulation agreements:

STEP #1 - Articulation committee should determine that the curricula are sufficiently coordinated to pursue the development of articulation agreements.

STEP #2 - Articulation committee should review other agreements being used and determine the best procedure for awarding credit earned at the secondary level.

STEP #3 - Articulation committee should develop a proposed articulation agreement and distribute it to the appropriate program coordinating committee and program advisory committee for review. Copies should also be sent to division superintendents, the Community College President, and general vocational advisory committees for their reaction as well.

STEP #4 - Comments on the proposed agreement should be considered by the articulation committee and changes made where appropriate.

STEP #5 - Submit a copy of the revised agreement to an attorney to determine the appropriateness and legality of the agreement.

STEP #6 - Revise, if necessary, and submit the final draft to the community college board for approval.

STEP #7 - Submit the approved articulation agreement to local school boards for their approval.

STEP #8 - Obtain official signatures and distribute copies to all parties involved.

STEP #9 - Inform the general public; elementary, secondary, and post-secondary counselors; and high school administrators and placement directors of the approved agreement.

STEP #10- Follow-up flow-through students, evaluate agreements and revise, if necessary.

STRATEGY #7 - ESTABLISH A COORDINATED CONTINUING EDUCATION PROGRAM

Continuing education programs at both the secondary and post-secondary levels are growing and expanding as more and more adult learners return to school for supplementary and preparatory skill development. Community colleges, as well as vocational centers and comprehensive secondary schools, offer a wide array of courses which address both vocational-technical and avocational interests. Lay instructors or adjunct instructors are employed to teach those classes that permanent faculty are not prepared to teach.

Usually, each school will independently conduct its own needs assessment, schedule classes, employ instructors and advertise their own continuing education course offerings. If secondary and post-secondary schools survey the same community and plan a program to meet community needs, there will surely be duplication of effort in planning and conducting adult programs.

The communication structure suggested in this handbook should provide the framework for a coordinated community-based continuing education program. When the following questions are asked by the articulation committee, their answers should provide guidance to develop a coordinated continuing education program.

QUESTION #1 - WHAT are the continuing education needs of the adult learners in this community?

PROCEDURE: Community continuing education needs may be determined through formal surveys, informal input from advisory committees, recommendations from program coordinating committees, recommendations from student services

personnel, recommendations from school administrators or governing boards, requests from community organizations or employers or a combination of these sources. The articulation committee should construct a list of potential continuing education courses based on the best information available.

QUESTION #2 - WHERE are the most suitable facilities and equipment in the community to provide this training?

PROCEDURE: Individually list beside each potential course the school with the most suitable facilities and equipment. If more than one school has facilities and equipment available that are equally suitable, temporarily list both locations for the course until other questions have been answered.

QUESTION #3 - WHO is the best prepared instructor in the community to provide this training?

PROCEDURE: Consider community college instructors and adjunct instructors, vocational school instructors, high school vocational instructors, experienced lay instructors, training instructors from business and industry and other individuals who have expertise in the subject area and list beside each course the instructor(s) best prepared to teach the course. If more than one instructor is equally prepared to teach the class, temporarily list all instructors for the course until other questions have been answered.

QUESTION #4 - WHEN is the best time for the prospective adult students to participate in the course?

PROCEDURE: The articulation committee should determine the best days of the week and the best clock hours to offer the course.

QUESTION #5 - WHY are adult students motivated to enroll in this course? (academic credit/vocational certificate/competency-based program development)

PROCEDURE: The articulation committee should determine which type of credit will be provided for the adult student upon successful completion of the course.

After these questions have been answered and the articulation committee has developed a list of potential continuing education courses matched with

the most suitable facilities and equipment, best prepared instructor(s), best time and type of credit; then, a master schedule for the community continuing education effort should be developed. When the committee is faced with a decision concerning which school or instructor should be used when more than one is equally desirable, the following considerations should be used:

1. Will the enrollment support two sections?

2. Should the course be team taught?

3. Can the course be alternated from one school or instructor to another on an annual or semester basis?

4. Are the continuing education courses equally assigned to each school?

An agreement should be developed between the community college, local school divisions and regional vocational centers which establishes the terms for joint use of facilities and instructors. Standardized instructor salaries, facility and equipment rental and operational costs should be determined prior to development of the master schedule.

A well-coordinated continuing education program will result in community college courses offered in secondary schools, vocational school instructors teaching in community college facilities and all other possible combinations. Meeting the occupational training needs of adult learners in the most productive manner should be the primary concern of all educators providing vocational instruction.

Once the master schedule has been established, continuing education courses may be advertised jointly, by individual school or both. An effort should be made, however, to inform the general public that the established continuing education program is the result of joint, coordinated planning.

STRATEGY #8 - DEVELOP JOINT RECRUITMENT ACTIVITIES FOR RELATED PROGRAMS

Once a program is coordinated and a competency-based curriculum is fully implemented, secondary and post-secondary schools should work together to publicize the advantages of the articulated program. Enrollments should increase at both levels and result in more students being better prepared for the world of work. More students should enter high school vocations because they may apply skills developed for college credit and more students should flow-through to community college programs because they do not have to repeat work on competencies already mastered.

Joint recruitment brochures (Appendix I) may be distributed which inform the public of an educational opportunity rather than attempt to sell a program on the basis of school facility or ancillary activities. Vocational program aduio-visual presentations may be developed for use by counselors and instructors at various levels. Costs for recruitment activities may be shared, thus, reducing the individual costs to each school.

STRATEGY #9 - DEVELOP A PROCEDURE FOR JOINT UTILIZATION AND DEVELOPMENT OF STAFF, FACILITIES, AND EQUIPMENT

In order that positive relationships are maintained between personnel at the secondary and post-secondary levels, a procedure should be developed to facilitate joint utilization of staff and facilities. Sharing of staff, facilities and equipment is in the best interest of the community and should be encouraged. Competition between schools for instructors or students is detrimental to the instructional program and should be discouraged. Where similar vocational programs are offered at more than one school in the same community, the salary scales for instructors should be consistent.

The articulation committee should develop recommendations regarding salaries for continuing education courses and equipment and facility rental. These recommendations should be presented to the governing boards for approval.

Salary committees for local school divisions and community colleges should communicate at budget time. An attempt should be made to maintain a consistent level of compensation for personnel with similar qualifications who are responsible for teaching the same vocational skills. A separate salary schedule for vocational instructors may become necessary as business and industry continue to compete for individuals with technical skills.

STRATEGY #10 - ESTABLISH A JOINT COMMUNIQUE TO THE PUBLIC

The communication structure recommended in this handbook provides the framework for planning and conducting a community-based vocational program. Cooperation between all agencies delivering vocational education will unify the effort and provide a basis for improving the image of vocational education to the public.

Each vocational education agency provides for public relations activities that keep the public abreast of the opportunities available for skill development. A portion of the public information effort could be accomplished through joint activities such as a newsletter or spot radio announcements that promote the articulated vocational education effort.

STRATEGY #11 - ESTABLISH COORDINATED STUDENT SERVICES

A Joint Pupil Services Planning Group should be established with representatives from each vocational education delivering agency. The primary responsibility of this group is to assume that the student makes a smooth transition from one school to another. This group should receive direction from the articulation committee and the general vocational advisory council. In addition, they should review the recommendations of these groups and evaluate their effect on pupil services when implemented.

Attention should be given to coordinating recordkeeping of secondary courses completed by vocational students. The same course may be recorded differently by each secondary school. As competency-based vocational programs are established, competency completion records will become part of each vocational student's permanent file.

Career information programs may be jointly organized and utilized for secondary and post-secondary students. Career materials may be shared among counselors from schools within a community college region.

Career plans developed for students at the secondary level should be forwarded to post-secondary counselors who continue to use them to provide career counseling. As articulation agreements are implemented between secondary and post-secondary programs, skill development must be documented and academic credit awarded for competencies achieved. As articulated programs are implemented, follow-up information will need to be provided on students in these programs in order that they may be evaluated.

Placement directors from all schools within a community college region should work together to place graduates on a job in their area of training. Follow-up information on students after employment should be gathered and shared with instructors, administrators and counselors. (Appendix J - Flo-sheet for Coordinated Student Services)

APPENDICES

APPENDIX A

TERMS AND DEFINITIONS*

ARTICULATION. A planned process within an educational system that coordinates instructional programs which will enable students to move from one instructional level to another, or from one institution to another at the same instructional level, without unnecessary duplication or gaps in the instructional program.

CHECKLIST. A list of activities or behaviors that are checked by a student, teacher, or observer as being completed during a particular observation session; frequently used to assess student performance in the psychomotor and affective domains of learning.

COMPETENCY. Demonstrated ability (including knowledge, skills, or attitudes) to perform a specific task successfully to meet a specified standard.

COMPETENCY-BASED EDUCATION (CBE). Educational programs in which required knowledge, skills, and attitudes are based on role-relevant competencies.

COMPETENCY-BASED EDUCATION STANDARDS. Standards for CBE in Virginia are as follows: (1) role-relevant competencies that include standards are identified and stated; (2) competencies are specified to students prior to instruction; (3) criterion-referenced measures are used to measure achievement of competencies; and (4) a system exists for documenting the competencies achieved by each student.

COMPETENCY RECORD/PROFILE. A document that provides specific information concerning achievement of competencies in a CBE course or program, including the following information: student name, program title, listing of all terminal competencies, enabling competencies if required, rating scale, and method for authenticating the record.

CONTENT/CONCEPT. A distinct grouping of tasks which are related to each other by the nature of the activity to be performed.

CRITERION (Criteria). The standard required for a student to reach mastery of an objective.

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* A SUGGESTED LIST OF TERMS AND DEFINITIONS approved in 1979 by Vocational and Adult Education, Virginia Department of Education, Richmond.

CRITERION-REFERENCED MEASURE (CRM). A test, test item, or a statement which describes how a student will be tested and/or evaluated. The CRM is based on the task/competency standard or criterion. Criterion-referenced measures may include the standard or criterion as illustrated in the following examples:

Examples: Psychomotor

Tune an adjusted carburetor in accordance with the manufacturer's specification within 45 minutes.

Cognitive

Identify nine out of ten technical terms used in masonry on a written test.

Affective

Exhibit positive attitudes in the vocational classroom and laboratory. Your attitudes will be evaluated by the "Program Attitude Checklist."

CRITERION-REFERENCED TESTING. A process of testing which yields measurements that are directly interpretable in terms of specified performance standards. An individual's performance is compared to a criterion, the criterion being the work or performance standard. Therefore, criterion-referenced testing is based on absolute standards stemming from the competency rather than relative standards such as class standing. (Also called criterion-referenced evaluation, objective-referenced testing, proficiency testing, or a domain-referenced testing.)

CURRICULUM: All the objectives, content, and learning activities arranged in a learning sequence for a particular instructional area. An orderly arrangement of integrated topics, activities, and experiences which students pursue for the attainment of a specified educational goal.

DUTY. One of the distinct major activities or units involved in the work performed in an occupation (i.e., Job-Duty-Task-Step).

ENABLING OBJECTIVE. An objective that identifies one thing a learner must be able to know or to do to perform the performance objective.

ENTRY-LEVEL SKILLS. The set of competencies required of a beginning worker in an occupation for immediate productivity upon entering that occupation.

JOB/OCCUPATION. The composite of duties and tasks performed regularly in one's trade, occupation, or profession (i.e., Job-Duty Task-Step).

INSTRUCTIONAL ACTIVITIES. Educational activities completed by the students to learn specific competencies. (Also called learning strategies.)

INSTRUCTIONAL RESOURCE GUIDE. A document that includes detailed information for developing competency-based courses and programs. The guide includes information concerning the occupational or program domain, task list, performance and enabling objectives, criterion-referenced measures, learning activities, tools/materials, references, program and course descriptions, course content outlines, classroom management systems, student recording systems, and additional resources.

OCCUPATIONAL DOMAIN. A group or listing of occupations within a vocational area that share common experiences, knowledge, and skill requirements such as manufacturing occupations and construction occupations.

PERFORMANCE. A clear statement of what the learner will be able to do after mastery status has been obtained.

PERFORMANCE GUIDE. A listing of steps in sequential order which the student must perform in achieving an objective.

PERFORMANCE OBJECTIVES. A statement, in precise measurable terms, of a particular behavior to be exhibited by a learner under specified conditions. It possesses each of the elements or characteristics specified below:

a. Condition. The performance situation confronting the learner is clearly specified. This specification includes equipment provided or withheld, environmental constraints such as temperature, space, etc.

b. Performance. The specific behavior expected of the learner is stated.

c. Standard (Criterion). The degree of acceptable performance is specified. This may be quantitative, qualitative, or both. If quantitative, 100 percent proficiency is assumed unless otherwise stated. In the standard ". . . locate shorts in an ignition system," it is assumed that all shorts must be located, compared to ". . . locate three or four shorts existing in an ignition system." If qualitative the standard is explicitly stated, e.g.,". . . measure the bearing to within .005 of that found by the instructor."

If the measure of quality is highly subjective, the instructor is assumed to be the judge of acceptable performance unless otherwise stated.

STANDARD. That part of a performance objective or of a criterion-referenced measure which describes how well or to what proficiency level a task must be performed. (Also called performance level, criterion, or work standard.)

STEP. The smallest aspect of a skill; a very specific level in the hierarchy of a job (i.e., Job-Duty-Task-Step); simple abilities needed to do a more complex task.

TASK. A unit of work activity or operation that constitutes a logical and necessary step in the performance of a duty.

	Job/Occupation	Duty	Task
Example:	Secretarial	Peforming computational clerical activities	Complete monthly statements for customers from invoices

TASK ANALYSIS. An organized method for identifying roles, responsibilities, and jobs performed by workers in an occupation or content in nonoccupational courses. Task analysis is used in CBE to establish instructional content and scope.

TASK LIST. A list of tasks performed by workers in an occupational domain (also called job inventory) or what is required to be taught in a nonoccupational course (industrial arts, general business, exploratory, etc.).

VALIDATION. A procedure used to determine and verify if tasks/competencies identified for a vocational program are valid.

VIRGINIA COMMUNITY COLLEGES, LOCATIONS, AND SERVICE REGIONS

BR BLUE RIDGE
Weyers Cave

CV CENTRAL VIRGINIA
Lynchburg

DSL DABNEY S. LANCASTER
Clifton Forge

D DANVILLE
Danville

ES EASTERN SHORE
Melfa

G GERMANNA
Locust Grove

JSR J. SARGEANT REYNOLDS
Downtown Campus
Richmond
Parham Road Campus
Henrico County
Western Campus
Goochland County

JT JOHN TYLER
Chester

LF LORD FAIRFAX
Middletown

ME MOUNTAIN EMPIRE
Big Stone Gap

NR NEW RIVER
Dublin

NV NORTHERN VIRGINIA
Alexandria Campus
Annandale Campus
Loudoun Campus
Manassas Campus
Woodbridge Campus

PH PATRICK HENRY
Martinsville

PDC PAUL D. CAMP
Franklin

PV PIEDMONT VIRGINIA
Charlottesville

R RAPPAHANNOCK
North Campus
Warsaw
South Campus
Glenns

Ss SOUTHSIDE VIRGINIA
Christanna Campus
Alberta
John H. Daniel Campus
Keysville

Sw SOUTHWEST VIRGINIA
Richlands

TN THOMAS NELSON
Hampton

T TIDEWATER
Chesapeake Campus
Chesapeake
Frederick Campus
Portsmouth
Virginia Beach Campus
Virginia Beach

VH VIRGINIA HIGHLANDS
Abingdon

VW VIRGINIA WESTERN
Roanoke

W WYTHEVILLE
Wytheville

NOTE: Bold lines indicate service regions
Dotted lines indicate shared service

APPENDIX B

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VIRGINIA COMMUNITY COLLEGE SYSTEM

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TELEPHONE: 804/225-2117

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Dr. James A. Armstrong, President
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Weyers Cave, Virginia 24486
Telephone: (703) 234-9261

CENTRAL VIRGINIA COMMUNITY COLLEGE
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Lynchburg, Virginia 24502
Telephone: (804) 239-0321

DABNEY S. LANCASTER COMMUNITY COLLEGE
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DANVILLE COMMUNITY COLLEGE
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EASTERN SHORE COMMUNITY COLLEGE
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GERMANNA COMMUNITY COLLEGE
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Telephone: (703) 399-1333

J. SARGEANT REYNOLDS COMMUNITY COLLEGE
Dr. S. A. Burnette, President

College Staff
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Richmond, Virginia 23241
Telephone: (804) 264-3200

Downtown Campus
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Richmond, Virginia 23241
Telephone: (804) 786-6249

Parham Road Campus
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Richmond, Virginia 23241
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Western Campus
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Richmond, Virginia 23241
Telephone: (804) 786-7112

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LORD FAIRFAX COMMUNITY COLLEGE
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Telephone: (703) 323-3000

Loudoun Campus
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Sterling, Virginia 22170
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Woodbridge Campus
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PATRICK HENRY COMMUNITY COLLEGE
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PAUL D. CAMP COMMUNITY COLLEGE
Dr. Johnnie Earl Merritt, President
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PIEDMONT VIRGINIA COMMUNITY COLLEGE
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North Campus
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Telephone: (804) 949-7111

John H. Daniel Campus
Keysville, Virginia 23947
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THOMAS NELSON COMMUNITY COLLEGE
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Hampton, Virginia 23670
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Dr. George B. Pass, President

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Portsmouth, Virginia 23703

Chesapeake Campus
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Telephone: (804) 547-9271

Frederick Campus
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Portsmouth, Virginia 23703
Telephone: (804) 484-2121

Virginia Beach Campus
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VIRGINIA HIGHLANDS COMMUNITY COLLEGE
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Telephone: (703) 628-6094

VIRGINIA WESTERN COMMUNITY COLLEGE
Dr. Charles L. Downs, President
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Roanoke, Virginia 24038
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WYTHEVILLE COMMUNITY COLLEGE
Dr. William F. Snyder, President
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Telephone: (703) 228-5541

July 1983

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APPENDIX C

SAMPLE LETTER

FROM COMMUNITY COLLEGE PRESIDENT TO DIVISION SUPERINTENDENT OF SCHOOLS

Dr. William Smith, Division Superintendent
Township Public Schools
P.O. Box 100
Township, VA 22222

Dear Dr. Smith:

The Township School Division is located in the region served by School Craft Community College. It is the mission of each community college in Virginia to provide a continuing, low-cost oportunity for all individuals in the Commonwealth to develop and extend their skills and knowledge. Principal emphasis is placed on occupational-technical education.

Since the Township School Division also provides programs designed to meet the vocational education needs of youth and adults within the School Craft Community College region, cooperation in the operation of these programs is a priority issue with the Community College Board. At the last Board meeting, the attached resolution, which clarifies the Board's position on articulation of vocational programs, was adopted. Please share this resolution with the Township School Board and appoint a staff member to serve on a joint articulation committee.

We expect this committee to develop an articulation plan which will identify strategies to facilitate coordination of vocational programs in this community college region. Copies of this plan will be presented to each governing Board for final approval.

I look forward to working with you and your staff in this articulation effort. Please call me at your convenience to discuss this matter in more detail.

Sincerely,

Dr. John Doe, President
School Craft Community College

SAMPLE RESOLUTION

WHEREAS, School Craft Community College was established in 1968 with a unique mission which complements the missions of the secondary schools and the senior colleges; and

WHEREAS, the School Craft Community College and local school divisions in this community college region provide vocational education programs for youth and adults; and

WHEREAS, the State Board of Vocational Education and the State Board for Community Colleges have expressed need for increased coordination of vocational programs at the local level; and

WHEREAS, the School Craft Community College Board desires to serve this community college region in the most effective and efficient manner and desires to provide the opportunity for individuals to extend the development of their skills and knowledge without unnecessary redundance, loss of time or additional cost; now, therefore, be it

RESOLVED by the School Craft Community College Board that the following statements of commitment to coordinate vocational programs be affirmed:

1 - Principal emphasis is placed on providing individual students an opportunity to transfer from secondary to post-secondary vocational programs without redundance in instruction, loss of time, loss of credit for work completed, or additional cost for work completed;

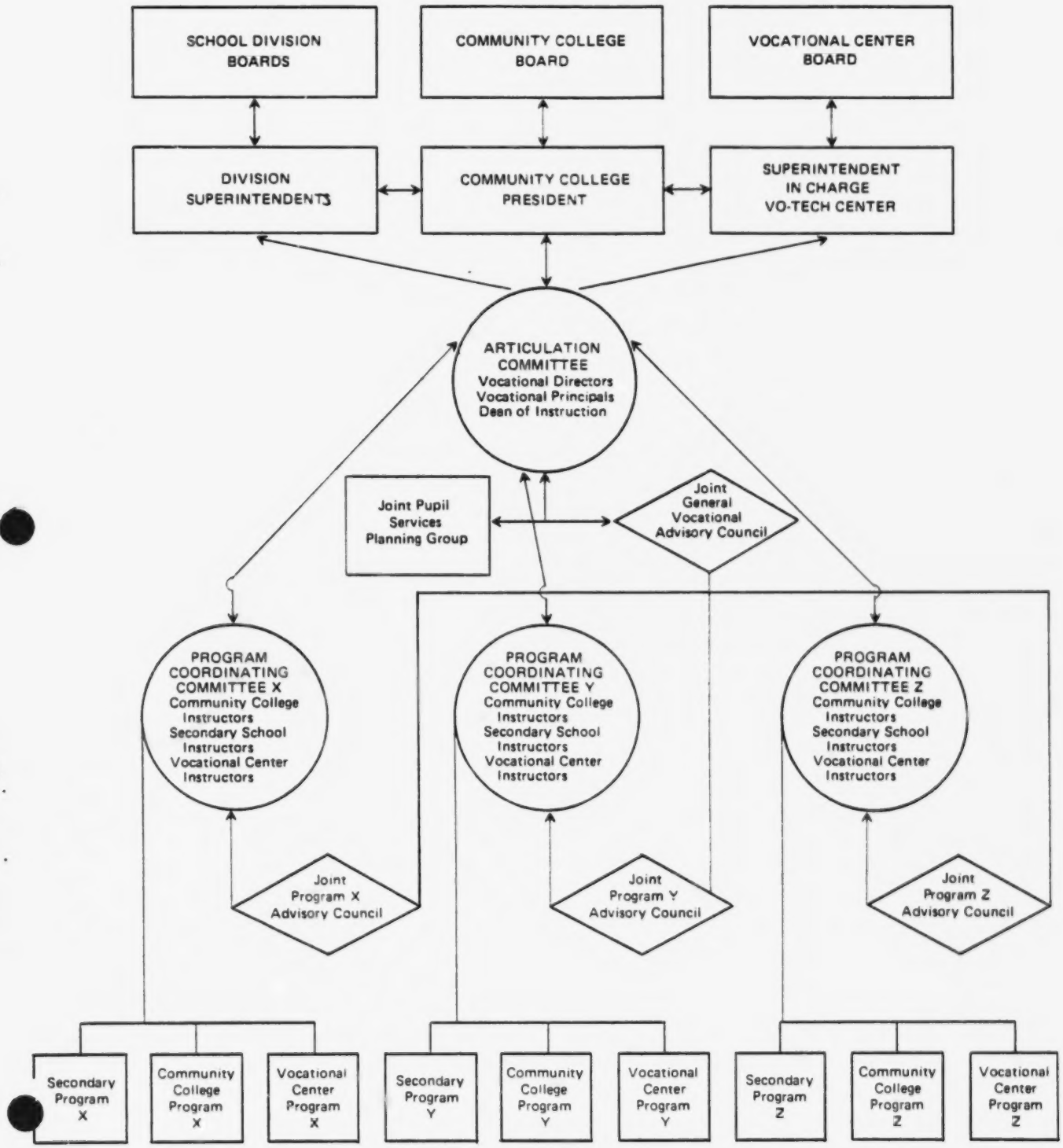
2 - An essential component of coordinated vocational programs is an articulation committee including representatives from each school division in the region which recommends policy to coordinate vocational programs; and

3 - Policy changes which are necessary to coordinate vocational programs should be recommended through the development of an articulation plan prepared by the articulation committee.

Signed: _____
Chairperson
School Craft Community
College Board

_____
President
School Craft Community
College

SAMPLE COMMUNICATION STRUCTURE TO FACILITATE ARTICULATION EFFORTS



APPENDIX E

(SAMPLE ARTICULATION PLAN FORMAT)

ARTICULATION PLAN
_____ COMMUNITY COLLEGE SERVICE REGION

Participating community college and school divisions

College/School Divisions	Chief Administrators
1.	
2.	
3.	
4.	

This approved articulation plan is submitted to:

and represents the completion of the initial phase in the development of an articulation agreement for the _____ Community College service region.

Submission date _____

_____ COMMUNITY COLLEGE REGION
ARTICULATION PLAN

EXISTING SITUATIONS
(EXAMPLE - Incompatible student evaluation and documentation systems are used.)

#1 _____

#2 _____

#3 _____

#4 _____

#5 _____

#6 _____

#7 _____

#8 _____

#9 _____

#10 _____

Priority order of VOCATIONAL PROGRAMS TO BE ARTICULATED.

PROGRAM	SCHOOLS INVOLVED	YEAR ARTICULATION WILL BE IMPLEMENTED
(EXAMPLE - Merchandising	SCC, GWHS, TJHS, SVTC	Fall, 1985)

(cont.)

ARTICULATION OBJECTIVES AND STRATEGIES

SITUATION # _____

OBJECTIVE	STRATEGIES	PERSON/GROUP RESPONSIBLE	COMPLETION DATE

(cont.)

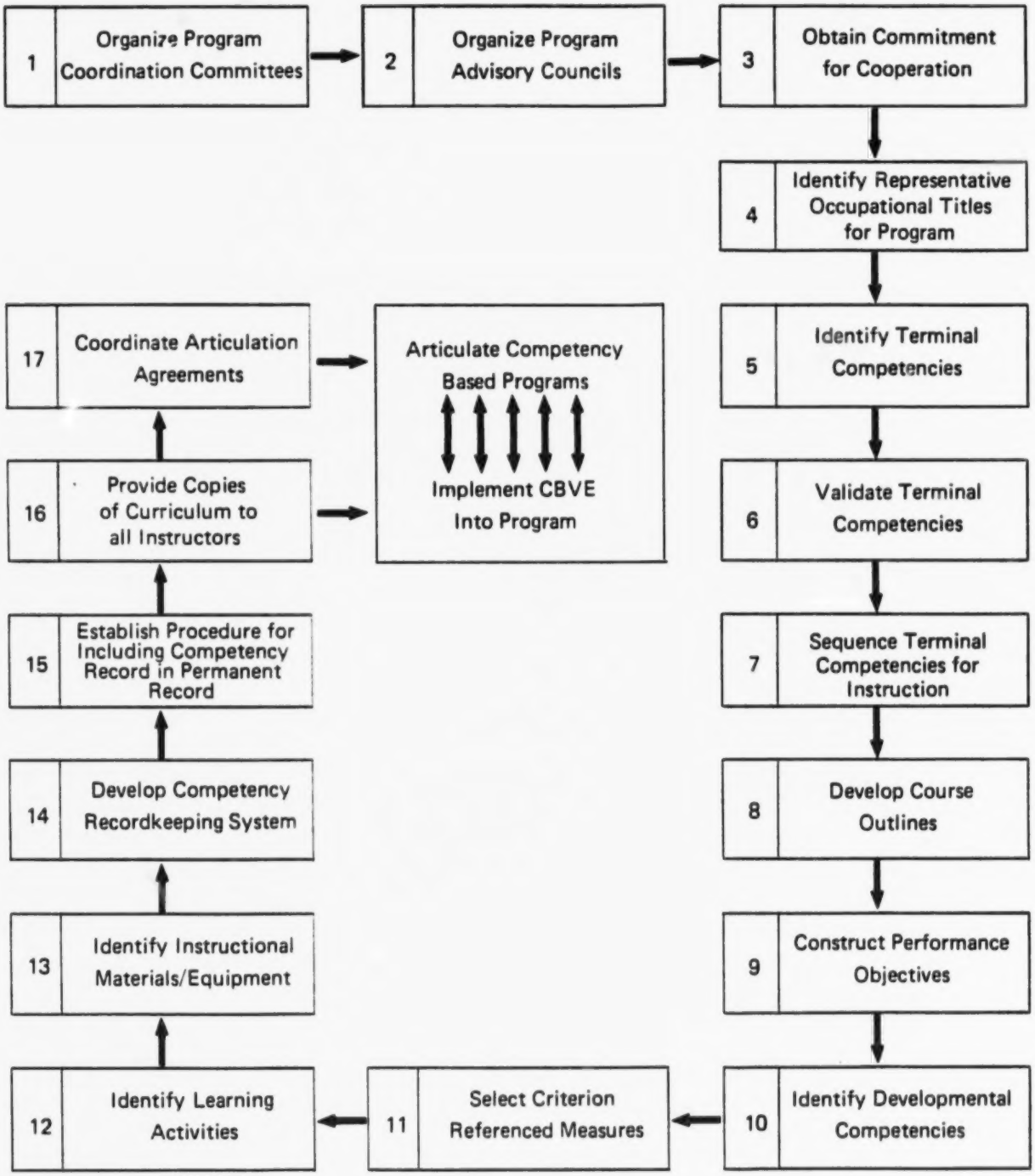
APPROVAL OF THE ARTICULATION PLAN

This articulation plan has been reviewed and approved as a plan for developing an articulation agreement in the _____ Community College service region.

SIGNATURES OF AUTHORIZING AGENTS:

Superintendent ( )	School Division
Superintendent ( )	School Division
Superintendent ( )	School Division
Superintendent ( )	School Division
Superintendent ( )	School Division
President ( )	Community College

CURRICULUM COORDINATION PROCEDURE CHART



PAVE

APPENDIX G

EXAMPLE #1

MERTZ VOCATIONAL CENTER
STUDENT COMPETENCY REPORT

School Year ____

A Consistently performs the skill at job level competence
B Has performed the skill more than once at job level competence
C Has performed the skill at job level competence
I Has attempted but not completed the skill at job level
F Has failed to complete the skill at job level competence after receiving instruction and many attempts

STUDENT'S NAME: _____ SS#: _____

Program: HEALTH OCCUPATIONS Course: _____ Final Level: _____

PROGRAM CODE	(Min. Obj.)	COMPETENCY PERFORMANCE OBJECTIVE	GRADING PERIOD			
UNIT: ORIENTATION TO COMPETENCY BASED EDUCATION						
CBE-1	☐	Demonstrates Knowledge of Competency Based Education				
CBE-2	☐	Demonstrates Knowledge of Student Competency Report				
CBE-3	☐	Demonstrates Knowledge of grading system				
CBE-4	☐	Demonstrates Knowledge of Progress/Difficulty Report				
CBE-5	☐	Demonstrates Knowledge of Permanent Record				
CBE-6	☐	Demonstrates Knowledge of student organization				
COORDINATING AND COMMUNICATING						
HO- 1.	☐	Assist with unit admitting procedures				
HO- 2.	☐	Assist with unit discharge procedures				
HO- 3.	☐	Assist with transferring patient				
HO- 4.	☐	Use the intercom				
	☐					
MAINTAINING A CLEAN, SAFE ENVIRONMENT						
HO- 5.	☐	Adjust the hospital beds				
HO- 6.	☐	Clean instruments and supplies				
HO- 7.	☐	Follow proper isolation techniques (gown, mask, gloves)				
HO- 8.	☐	Follow proper isolation techniques (diet tray)				
HO- 9.	☐	Follow proper isolation techniques (soiled materials)				
HO- 10.	☐	Follow proper isolation techniques (terminal disinfection)				
HO- 11.	☐	Make occupied bed				
HO- 12.	☐	Make unoccupied bed				
HO- 13.	☐	Make the postoperative or recovery bed				
	☐					
CARING FOR THE PERSONAL NEEDS OF PATIENTS						
HO- 14.	☐	Assist in putting on or removing braces of a patient				
HO- 15.	☐	Assist patient in crutch walking				
HO- 16.	☐	Assist patient in dressing and undressing				
HO- 17.	☐	Assist patient in standing				
HO- 18.	☐	Assist patient in walker use				
HO- 19.	☐	Assist patient in walking				
HO- 20.	☐	Assist with or shave the male patient				
HO- 21.	☐	Care for or assist patient in caring for hair.				
HO- 22.	☐	Care for or assist patient in caring for toenails and fingernails				
HO- 23.	☐	Give backrubs to patient				
HO- 24.	☐	Give skin care to comatose or semi-comatose patient				
HO- 25.	☐	Give skin care to patient in casts and/or traction				
HO- 26.	☐	Give skin care to patient in restraints				
HO- 27.	☐	Give skin care to patient with decubitus ulcers				
HO- 28.	☐	Give or assist patient in taking bath				
HO- 29.	☐	Assist with oral hygiene				
HO- 30.	☐	Give oral hygiene				
HO- 31.	☐	Give or assist with oral hygiene (denture care)				
HO- 32.	☐	Move patient between a stretcher and a bed using three-man lift				
HO- 33.	☐	Move patient between a stretcher and a bed using transfer sheet				
HO- 34.	☐	Move patient to and from a wheelchair (a patient can stand)				
HO- 35.	☐	Move patient to and from a wheelchair (a patient who cannot stand)				
HO- 36.	☐	Transport the patient by wheelchair				
HO- 37.	☐	Transport patient by stretcher				
	☐					
ASSISTING WITH NUTRITION AND ELIMINATION NEEDS OF PATIENTS						
HO- 38.	☐	Assist patient in eating				
HO- 39.	☐	Assist patient to bathroom				
HO- 40.	☐	Assist patient in using a bedpan				
HO- 41.	☐	Assist patient in using urinal				
HO- 42.	☐	Assist with removing or remove fecal impaction				
HO- 43.	☐	Distribute drinking water				
HO- 44.	☐	Feed patient (adults)				
HO- 45.	☐					
HO- 46.	☐	Observe, measure and report food and fluid intake				
HO- 47.	☐	Observe, measure and report output of patient				
	☐					
HO- 48.	☐	Apply cold compresses				
HO- 49.	☐	Administer hot soaks				
HO- 50.	☐	Administer sitz baths				
HO- 51.	☐	Apply ace bandages				
HO- 52.	☐	Apply heat lamps				
HO- 53.	☐	Apply heating pads				
HO- 54.	☐	Apply hot compresses				
HO- 55.	☐	Apply hot packs				
HO- 56.	☐	Apply hot water bottle				
HO- 57.	☐	Apply ice bags				
HO- 58.	☐	Apply restraints				

REDUCED

(cont.)

HEALTH OCCUPATIONS - PAGE 2

HO- 59. Assist with preventing bed sores
HO- 60. Assist with or give range of motion exercises
HO- 61. Assist patient to dangle
HO- 62. Assist patient to turn, cough and deep breathe
HO- 63. Assist with or connect catheters and tubing to drainage
HO- 64. Assist with post-mortem care
HO- 65. Collect a clean catch urine specimen
HO- 66. Collect a routine urine specimen
HO- 67. Collect a 24-hour urine specimen
HO- 68. Collect sputum specimen
HO- 69. Collect stool specimen
HO- 70. Measure and record contents of gastric and intestinal drainge bottle
HO- 71. Give colostomy care
HO- 72. Give perineal care
HO- 73. Prepare and give a vaginal douche
HO- 74. Prepare and give an enema
HO- 75. Measure and record blood pressure
HO- 76. Measure and record pulse (radial, temporal, femoral, carotid, pedal)
HO- 77. Measure pulse (apical)
HO- 78. Measure and record temperature
HO- 79. Take and record patient's height and weight
HO- 81. Test urine for sugar and acetone
HO- 82. Insert rectal suppositories
HO- 83. Insert rectal tube

ASSISTING WITH EXAMINATION
HO- 84. Change paper on exam table
HO- 85. Drape patient for exam
HO- 86. Set up vaginal speciment stand (pap smear)
HO- 87. Weigh patient (infant)
HO- 88. Weigh patient (adult)

PERFORMING CLERICAL TASKS
HO- 89. Answer telephone
HO- 90. Complete medical request slips such as: lab, x-ray, or hearing test
HO- 91. Schedule clinic appointments

ADMINISTERING PERSONAL HYGIENE AND COMFORT MEASURES
HO- 92. Administer perineal care
HO- 93. Clean the incontinent patient
HO- 94. Prevent pressure on bony prominences

ASSISTING WITH AMBULATION AND MOVEMENT
HO- 95. Position patient for other medical reasons
HO- 96. Support patient to dangle feet at bedside

PERFORMING HOUSEKEEPING FUNCTIONS
HO- 97. Clean closets and bedside tables
HO- 98. Clean waste receptacles with disinfectant solution
HO- 99. Stock supplies
HO-100. Wash utensils and equipment

REDUCED

AFFECTIVE COMPETENCIES

COMPETENCY	GRADING PERIOD			
USES CORRECT SAFETY PROCEDURES				
USES TIME WELL				
IS PUNCTUAL				
FOLLOWS INSTRUCTIONS				
WORKS WELL WITH OTHERS				
TAKES CARE OF TOOLS, EQUIPMENT & BUILDING				
TAKES PRIDE IN WORKMANSHIP				
PARTICIPATES IN CLUB ACTIVITIES				
ATTENDS CLASS REGULARLY				
DAYS ABSENT/DAYS POSSIBLE				

EVALUATION CODE

A EXCELLENT
B AVERAGE
C POOR (CANNOT CONTINUE IN PROGRAM WITHOUT IMPROVEMENT)
I NO OPPORTUNITY TO EVALUATE
F UNACCEPTABLE (SUSPENDED FROM COURSE)

COMPETENCY ACHIEVEMENT RECORD: AUTOMOTIVE MECHANIC

NAME _____ SCHOOL(S) _____

SS# _____ CLASSROOM HOURS _____ COURSE NO. _____

		4	3	2	1	0
1.1.	INSPECT TURN SIGNALS					
1.2.	ADJUST HEADLIGHTS					
1.3.	INSPECT BRAKING SYSTEM					
1.4.	INSPECT EXHAUST SYSTEM					
1.5.	PERFORM OPERATIONAL INSPECTION OF LIGHTING SYSTEM					
1.6.	INSPECT TIRES					
1.7.	LOCATE VEHICLE ID # & DETERMINE YR. OF MANUFACTURE					
1.8.	INSPECT EMISSION CONTROL DEVICES					
1.9.	INSPECT GLASS & WINDSHIELD WIPERS					
1.10.	INSPECT FRONT SUSPENSION					
1.11.	INSPECT STEERING LINKAGE & STEERING GEAR					
2.1.	DIAGNOSE DIFFERENTIAL MALFUNCTIONS					
2.2.	REPLACE REAR AXLE SHAFT, BEARING & SEAL					
2.3.	INSPECT PINION SEAL					
2.4.	INSPECT DRIVE SHAFT, U-JOINTS & CENTER BEARINGS					
2.5.	REPLACE UNIVERSAL JOINTS					
2.6.	REMOVE & REPLACE A PROPELLER SHAFT					
2.7.	ADJUST DIFFERENTIAL FLUID LEVEL					
3.1.	CHECK COOLANT FREEZING POINT					
3.2.	CHECK COOLANT OPERATING TEMPERATURE					
3.3.	PRESSURE TEST COOLING SYSTEM					
3.4.	CHEMICALLY CLEAN & FLUSH COOLING SYSTEM					
3.5.	INSPECT, ADJUST & REPLACE FAN BELTS					
3.6.	REMOVE & REPLACE RADIATORS					
3.7.	REPLACE RADIATOR HOSES					
3.8.	REPLACE WATER PUMP					
3.9.	SOLDER MINOR LEAKS IN RADIATORS					
3.10.	REMOVE, TEST & REPLACE THERMOSTAT					

GRADING SYSTEM*
A or 4-HIGHLY PROFICIENT
B or 3-COMPETENT
C or 2-PARTIALLY PROFICIENT
D or 1-LIMITED
F or 0-CANNOT PERFORM

*DETAILED EXPLANATION ON REVERSE SIDE.

PERSONAL CHARACTERISTICS	4	3	2	1	0
A. USES TIME WELL					
B. IS PUNCTUAL					
C. FOLLOWS INSTRUCTIONS					
D. WORKS WELL WITH OTHERS					
E. TAKES CARE OF TOOLS & EQUIP.					
F. TAKES PRIDE IN WORKMANSHIP					
G. ATTENDS REGULARLY					
H. IS AMBITIOUS					
I. COMMUNICATES WELL WITH OTHERS					

		4	3	2	1	0
4.1.	LOCATE & REPAIR SHORTS & OPEN CIRCUITS					
4.2.	REPLACE ELECTRICAL ACCESSORIES					
4.3.	REPAIR OR REPLACE LIGHTING SYSTEM COMPONENTS					
4.4.	REPLACE CHASSIS & UNDERHOOD WIRING					
4.5.	REPLACE FLASHER UNITS					
4.6.	REPLACE IGNITION SWITCH & RESISTOR					
4.7.	TEST DASH UNITS					
4.8.	DIAGNOSE IGNITION SWITCH MALFUNCTIONS					
4.9.	DIAGNOSE & REPAIR DIRECTION SIGNAL CIRCUITS					
4.10.	LOCATE & REPLACE BLOWN FUSES					
4.11.	TEST INDICATOR LAMP CIRCUITRY					
5.1.	ANALYZE MALFUNCTIONS IN CRANKING SYSTEM					
5.2.	REPLACE SOLENOIDS					
5.3.	REPAIR STARTER					
5.4.	REPLACE STARTER					
5.5.	LOAD TEST A STARTER					
5.6.	TEST STARTER CIRCUIT & STARTER CONTROL RESISTANCE					
6.1.	SERVICE OR REPLACE BATTERIES, CABLES & BATTERY BOX					
6.2.	DETERMINE BATTERY STATE OF CHARGE					
6.3.	LOAD TEST A BATTERY					
6.4.	CHARGE A BATTERY					

INSTRUCTOR'S SIGNATURE _____ STUDENT'S SIGNATURE _____ OFFICIAL SCHOOL RECORD

EXAMPLE #2

REDUCED

NAME _____ **RESIDENTIAL/INDUSTRIAL ELECTRICIAN COMPETENCY RECORD**

SS# _____ SCHOOL(S) _____

*Indicates suggested first year competencies. (Grading is as shown on reverse side)

		SECONDARY			POST SECONDARY		
		DATE	RATING	INSTRUCTOR	DATE	RATING	INSTRUCTOR
*1.1	DRAW A FLOOR PLAN SHOWING ELECTRICAL SYMBOLS						
*1.2	MARK LOCATION OF OUTLETS ON WOOD FRAMING						
*1.3	MARK LOCATION OF SPECIAL PURPOSE OUTLETS ON WOOD FRAMING						
*1.4	MARK LOCATION OF SERVICE ENTRANCE EQUIPMENT						
*1.5	CALCULATE NUMBER & TYPES OF CIRCUITS TO BE USED						
*1.6	CALCULATE LIGHTING REQUIREMENTS						
2.1	CALCULATE TOTAL LOAD DEMAND						
2.2	INSTALL AN S.E. CABLE SERVICE						
2.3	ASSEMBLE & INSTALL RIGID CONDUIT						
2.4	INSTALL A RIGID CONDUIT SERVICE ENTRANCE						
2.5	INSTALL CIRCUIT BREAKERS & CONNECT BRANCH CIRCUITS						
2.6	INSTALL "S" TYPE FUSES & CONNECT BRANCH CIRCUITS						
2.7	CUT, FIT & INSTALL METAL RACEWAY						
2.8	INSTALL METALLIC TUBING (E.M.T.)						
2.9	INSTALL FLEXIBLE CONDUIT						
3.1	INSTALL HIGH VOLTAGE RECEPTACLE						
*3.2	CONNECT POWER CABLE TO EQUIPMENT & INSTALL GROUNDING LEAD						
*3.3	TEST CIRCUITS & SWITCH CONTINUITY						
*3.4	TEST CIRCUITS FOR SHORTS & GROUNDS						
*3.5	INSPECT INSULATION FOR BURNS, CRACKS, BRITTLENESS & THE WIRE FOR CORROSION						
*3.6	INSPECT & TEST WIRING FOR OVERLOAD WITH AN INDUCTIVE AMMETER						
*3.7	REPAIR NON-OPERATIVE OR MALFUNCTIONING CIRCUITS						
*3.8	INSTALL ROUGHING BOXES IN WOOD FRAMING						
*3.9	DRILL HOLES, ROUTE & PULL CABLE IN WOOD FRAMING						
*3.10	ENTER CABLES INTO BOXES, SECURE CABLE & SPLICE CONDUCTORS						
*3.11	INSTALL SWITCHES, RECEPTACLES & FINISH PLATES						
*3.12	INSTALL A GROUND FAULT INTERRUPTER CIRCUIT						
3.13	INSTALL A RANGE CIRCUIT						
3.14	INSTALL A DRYER CIRCUIT						

REDUCED

EXAMPLE #3

COMPETENCY ACHIEVEMENT RECORD: DRAFTING/MECHANICAL DRAWING

NAME _____ SCHOOL(S) _____

SS# _____ CLASSROOM HOURS _____ COURSE NO. _____

	4	3	2	1	0
1. TRACE DRAWINGS					
2. CORRECT & REVISE DRAWINGS					
3. KNOW & APPLY GENERAL SHOP PROCESSES TO DRAWINGS					
4. APPLY DESCRIPTIVE GEOMETRY PRINCIPLES					
5. SELECT APPROPRIATE TYPE OF PROJECTION TO REPRESENT OBJECTS					
6. GEOMETRIC CONSTRUCTION PRINCIPLES					
7. DIMENSIONING: BASIC DIMENSIONING PRINCIPLES					
8. TOLERANCING					
9. SURFACE FINISHES					
10. APPLY & USE DRAFTING STANDARDS MANUAL					
11. USE TECHNICAL LITERATURE					
12. PREPARE PRINTS OF ORIGINAL DRAWINGS					
13. MAKE MICROFILM COPIES OF DRAWINGS					
14. MAINTAIN REPRODUCTION MACHINE					
15. ADJUST DRAFTING MACHINES					
16. CLEAN DRAFTING STATION					
17. MAINTAIN DRAFTING EQUIPMENT					
18. USE BASIC DRAFTING EQUIPMENT					
19. SELECT APPROPRIATE DRAWING MEDIUMS AND MATERIALS					
20. PREPARE INK DRAWINGS					
21. INVENTORY DRAFTING SUPPLIES					
22. ORDER DRAFTING SUPPLIES					
23. MAINTAIN & UPDATE REFERENCE MATERIALS					
24. USE FILE SYSTEM FOR DRAWING					
25. LETTER FREEHAND					
26. LETTER USING MECHANICAL DEVICES & TEMPLATES					
27. LETTER USING TRANSFER & PRESSURE SENSITIVE LETTERS					
28. DRAW BAR CHARTS					
29. DRAW PIE CHARTS					
30. DRAW SEQUENCE OF OPERATIONS CHART					
31. DRAW RECTILINEAR GRAPH					
32. DRAW SEMI LOG GRAPH					
33. DRAW LOG GRAPH					
34. DRAW POLAR GRAPH					
35. DRAW 3-DIMENSIONAL GRAPH					
36. PREPARE ORTHOGRAPHIC SKETCHES					
37. PREPARE PICTORIAL SKETCHES					
38. PREPARE & DIMENSION AN ISOMETRIC DRAWING					
39. PREPARE AN OBLIQUE DRAWING					
40. PREPARE A PERSPECTIVE DRAWING					
41. PREPARE A DETAIL WORKING DRAWING					
42. PREPARE A DETAIL ASSEMBLY DRAWING					

GRADING SYSTEM*

4 - HIGHLY PROFICIENT
3 - COMPETENT
2 - PARTIALLY PROFICIENT
1 - EXTREMELY LIMITED
0 - CANNOT PERFORM

*DETAILED EXPLANATION ON REVERSE SIDE.

PERSONAL CHARACTERISTICS	4	3	2	1	0
A. USES TIME WELL					
B. IS PUNCTUAL					
C. FOLLOWS INSTRUCTIONS					
D. WORKS WELL WITH OTHERS					
E. TAKES CARE OF TOOLS & EQUIP.					
F. TAKES PRIDE IN WORKMANSHIP					
G. ATTENDS REGULARLY					
H. IS AMBITIOUS					
I. COMMUNICATES WELL WITH OTHERS					

	4	3	2	1	0
43. PREPARE DETAIL DRAWINGS OF CAMS					
44. PREPARE DETAIL DRAWINGS OF GEARS					
45. PREPARE DRAWINGS OF INTERSECTIONS & DEVELOPMENTS					
46. DRAW DETAILED THREAD REPRESENTATIONS: ACME					
47. SQUARE					
48. UNIFIED					
49. DRAW SCHEMATIC THREAD REPRESENTATIONS					
50. DRAW SIMPLIFIED THREAD REPRESENTATIONS					
51. WRITE COMPLETE THREAD NOTE FOR BOLTS, SCREWS, ETC.					
52. DETAIL FASTENERS--SQ. & HEX. BOLTS & NUTS					
53. USE THREAD TABLES					
54. BASIC MATH. CALCULATIONS: FRACTIONS					
55. DECIMALS					
56. RATIOS & PROPORTIONS					
57. BASIC TRIG. PRINCIPLES					
58. MAKING PRECISION MEASUREMENTS: USING MICROMETERS					
59. USING CALIPERS					
60. OTHER PREC. INSTR.					
61. CONVERSION OF ENGLISH TO METRIC MEASUREMENTS					
62.					
63.					
64.					
65.					
66.					
67.					
68.					
69.					
70.					
71.					
72.					
73.					
74.					
75.					

INSTRUCTOR'S SIGNATURE _____ STUDENT'S SIGNATURE _____ OFFICIAL SCHOOL RECORD

EXAMPLE #4

REDUCED

REDUCED

GRADING SYSTEM

4 — Highly proficient: Can complete task quickly and accurately, can direct others in how to do task. Needs only normal supervision.

3 — Competent: Can do all parts of the task. Needs only spot check of completed work. Meets minimum entry level requirements. Needs job entry supervision.

2 — Partially proficient: Can do most parts of the task. Needs help only on hardest parts. May not meet all job entry level requirements for speed and accuracy. Needs close supervision.

1 — Extremely limited: Can do simple parts of task. Needs to be told or shown how to do most of task. Needs extremely close supervision.

0 — Can not perform any part of task at a level sufficient for participation in a work environment.

A — Excellent

B — Above average

C — Average

D — Below average

F — Not acceptable

HEATING AIR CONDITIONING
AND REFRIGERATION

COMPETENCY AREAS

A. Shop/Job Practice
B. Enabling Theory
C. Enabling Practical Skills
D. Troubleshooting Skills
I. Installing Residential Outdoor Units
II. Installing Window Air Conditioning Units
III. Installing Evaporator or Indoor Coils
IV. Installing Small Refrigeration Units
V. Servicing and Repairing Automobile Air Conditioners
VI. Installing, Maintaining, and Repairing Automobile Air Conditioners
VII. Installing, Servicing, and Repairing Heating Systems Units
VIII. Estimating Cost of Repairs, Customer Service, and Shop Management

Career Center
Arlington Public Schools
Competency-Based Vocational Education

HEATING, AIR CONDITIONING, AND REFRIGERATION

TRAINING ACHIEVEMENT RECORD

NAME _____
COURSE _____
DATE ENTERED _____ DATE COMPLETED _____
CERTIFIED BY _____

EXAMPLE #5

TO THE STUDENT

HEATING, AIR CONDITIONING, AND REFRIGERATION is a Competency-Based Vocational Education course designed to help you develop skills and competencies needed to enter the field of heating, air conditioning, and refrigeration. All skills and competencies listed in this training record apply directly to actual job duties or tasks in one or more of the following occupations identified in The Dictionary of Occupational Titles.

620.281-010	AIR CONDITIONING MECHANIC
637.261-010	AIR CONDITIONING INSTALLER-SERVICER, WINDOW UNIT
637.261-014	ENVIRONMENTAL-SYSTEM INSTALLER-SERVICER
637.261-026	REFRIGERATION MECHANIC
637.381-014	REFRIGERATION UNIT REPAIRER
637.664-010	ENVIRONMENTAL-CONTROL-SYSTEM INSTALLER, HELPER
637.687-014	AIR CONDITIONING INSTALLER-HELPER, WINDOW UNIT
637.687-01	REFRIGERATION MECHANIC HELPER
837.646-010	AIR CONDITIONING INSTALLER, DOMESTIC

This student record will be kept on file during the course. Upon completion, retain the training record for your future educational or employment purposes.

RATING LEGEND

S Satisfactory
O Outstanding
X Incomplete
_ Not covered

	ACHIEVED SKILLS AND COMPETENCIES	RATING	DATE	INITIALS
VIII.	ESTIMATING COST OF REPAIRS, CUSTOMER SERVICES, AND SHOP MANAGEMENT			
8.1	Estimate repair and replacement costs for window units			
8.2	Estimate repair and replacement costs for residential central units			
8.3	Estimate repair and replacement costs for automobile air conditioning units			
8.4	Estimate repair and replacement costs for domestic refrigerators			
8.5	Estimate repair/replacement costs for heating units			
8.6	Complete service call reports and receipts			
8.7	Cite permit requirements and procedures			
8.8	Identify warranty requirements for heating			
8.9	Maintain effective customer relations on service calls			
8.10	Work supply and customer complaint desk			
	TEACHER'S COMMENTS			
	ATTENDANCE RECORD			
	NUMBER DAYS/HOURS OF COURSE			
	NUMBER DAYS/HOURS ABSENT (excused)			
	NUMBER DAYS/HOURS ABSENT (unexcused)			

Name _____ SSN _____ Date Trainee Entered Training _____

Title CARPENTER, CONSTRUCTION DOT Code 860.381 Certified by _____ Form No. 440.84 A

Achieved Individual Marketable Skill		PERFORMANCE				KNOWLEDGE			
		1	2	3	4	a	b	c	d
Safety									
1. Practice safety on the job	4d								
2. Know & use safe practice handling tools, woodworking machinery	4d								
General									
3. Know & understand carpenter terminology	4d								
4. Use & maintain common hand tools	3c								
5. Use & maintain measuring tools & equipment	3c								
6. Use & maintain power operated woodworking machines	3c								
7. Read, understand & interpret building sketches	2b								
Foundations, Walls, Floors & Stairs									
8. Lay out building lines & set stakes for grading	3c								
9. Build & place straight concrete forms	3c								
10. Line up & brace concrete walls & columns	3c								
11. Lay out footings, build or place forms & brace	3c								
12. Build irregular concrete forms	3c								
13. Lay out & cut stairs & treads; install railings	2b								
Framing (Foundations & Walls)									
14. Lay out & frame sills & girders	3c								
15. Frame & set floor joists	3c								
16. Lay out walls & partitions	3c								
17. Erect walls & partitions	3c								
18. Install sheathing & plaster grounds	3c								
Roofs									
19. Frame & set common rafters	3c								
20. Frame & set valley rafters	3c								
21. Frame & set hip rafters	3c								
22. Frame & set jack rafters	3c								
23. Apply sheathing, composition shingles & other types of roof coverings	3c								
Exterior Millwork									
24. Determine correct tools & materials, supplies for task	2b								
25. Operate skill saw, electric drill & sander	3c								
26. Set up & operate bench saw	3c								
Interior Wall Coverings									
27. Apply wood coverings	3c								
28. Apply composition, sheet rock or fiber board	3c								
29. Install baseboards	3c								
Floors									
30. Lay sub-flooring	3c								
31. Lay hardwood flooring	3c								
32. Build & place forms for concrete floors	3c								

EXAMPLE #6

45

REDUCED

TRAINING ACHIEVEMENT RECORD

GENERAL EMPLOYABILITY TRAITS (proficiency code key)		
FACTORS	**SCALE VALUE**	**DEFINITION**
PERFORMANCE LEVEL	1	EXTREMELY LIMITED: Can do simple parts of task—Needs to be told/shown how to do most of task—Needs extremely close supervision
	2	PARTIALLY PROFICIENT: Can do most parts of task—Needs help only on hardest parts—May not meet local demands for speed and accuracy—Needs close supervision
	3	COMPETENT: Can do all parts of task—Needs only spot check of completed work—Meets minimum local demands for speed and accuracy—Needs job entry supervision
	4	HIGHLY PROFICIENT: Can complete task quickly and accurately—Can direct others in how to do the task—Needs normal supervision
KNOWLEDGE LEVEL	a	NOMENCLATURE: Can identify parts, tools, and understand simple facts about task—Can identify related basic facts and terms
	b	PROCEDURES: Can name most steps in doing task—Needs help interpreting written instructions—Can explain basic facts and state general principles
	c	TECHNIQUES AND PRINCIPLES: Can explain how and when task must be done; why each step is needed—Can interpret written and oral instructions—Can analyze facts/principles
	d	OPERATING PROFICIENCY: Identify, measure, and use trouble shooting techniques resolving task related problems—Can evaluate conditions and make proper decisions
PERSONAL BEHAVIOR	I	UNRELIABLE, inappropriate personal appearance, disrupting, uncooperative, disinterested, disrespectful
	II	OCCASIONALLY reliable, cooperative, responsible, interested, respectful, and satisfactory personal appearance
	III	USUALLY reliable, cooperative, responsible, interested, respectful and appropriate personal appearance
	IV	CONSISTENTLY reliable, cooperative, responsible, interested, respectful and appropriate personal appearance
	V	EXCEPTIONALLY reliable, cooperative, responsible, interested, respectful and appropriate personal appearance, demonstrates self assurance

EXPLANATION

Occupational skills can be used alone or together in any combination to define a level of training achievement for a specific job skill.
Example: 1b and/or b. General Employability Traits are to be used when rating attitude and professional behavior.

IMPORTANT: Recommended changes in format, line items, and employability traits should be forwarded to: Chief, Vocational Training, Office of Program Development, Job Corps, MA/DOL, Washington, D. C. 20210

REDUCED

INTERPRETATION OF STUDENT RECORD

There will be a check to show the student's level of achievement for each competency.

NO EXPOSURE - Has had no exposure to this competency.
KNOWS THEORY - Knows and understands the underlying theory, concepts, and principles.
PROFICIENCY 1 - Degree of skill is below minimally acceptable performance level.
PROFICIENCY 2 - Minimally acceptable level of skill; can perform with supervision and/or assistance.
PROFICIENCY 3 - High level of skill; can perform independently and consistently at high level.

CERTIFICATION OF COMPETENCY

I hereby certify that the student named herein has achieved the level of proficiency shown for each of the competencies in the preceding list and has completed _____ hours of instruction with an attendance rate of _____ percent.

_____ *Instructor's Signature*

_____ *Date of Certification*

ADDITIONAL COMMENTS

_____

_____

_____

_____

STUDENT _____
TEACHER _____
SCHOOL _____
LEA _____

VOCATIONAL EDUCATION COMPETENCY RECORD

Program Area: _____

Course Name: _____ **No.** _____

North Carolina Department of Public Instruction
Division of Vocational Education
Raleigh, North Carolina

EXAMPLE #7

ROGRAM AREA ____________________

P. .	COMPETENCY STATEMENT	No Exposure	Knows Theory	Proficiency 1	Proficiency 2	Proficiency 3
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		No Exposure	Knows Theory	Proficiency 1	Proficiency 2	Proficiency 3
021.						
022.						
023.						
024.						
025.						
026.						
027.						
028.						
029.						
030.						
031.						
032.						
033.						
034.						
035.						
036.						
037.						
038.						
039.						
040.						

OFFICIAL SCHOOL RECORD

Competency Record

AUTOMECHANICS

NAME_____ SCHOOL_____ - _____

Schoolcraft Community College District Articulation Project

The competence record tells what has been demonstrated.

Grading: + = Exemplary performance on task. (Demonstrated task and met suggested criteria well above expected response within 125% of flat rate.)
✓ = Satisfactory performance on task. (Achieved 100% on test/performance of suggested task criteria.)
A = Attempted performance on task. (Made an unsuccessful effort to fulfill the suggested task criteria.)

		Secondary			Post Secondary		
		Grade	Date	Teacher	Grade	Date	Teacher
DUTY:	PERFORMING ENGINE OVERHAUL ACTIVITIES						
A-1	Clean an engine.						
A-2	Replace engine mounts.						
A-3	Remove engine with transmission from vehicle.						
A-4	Install engine with transmission.						
A-5	Di: assemble engine with transmission.						
A-6	Clean engine parts and check for conditions.						
A-7	Replace oil pan gaskets.						
A-8	Replace seals and gaskets.						
A-9	Replace oil pump.						
A-10	Remove and install camshaft.						
A-11	Replace camshaft bearings.						
A-12	Replace crankshaft main bearings.						
A-13	Remove, inspect and install crankshaft.						
A-14	Perform operational inspections to test engine lubrication system.						
A-15	Remove and install (press fit) piston pin.						
A-16	Remove and install connecting rod and piston assemblies.						
A-17	Remove and install piston rings.						
A-18	Replace connecting rod bearings.						
A-19	Check cylinder head warpage.						
A-20	Remove valves.						
A-21	Reface valve seats.						
A-22	Reface valves.						
A-23	Reaming valve guides.						
A-24	Install valves.						
A-25	Valve adjustment.						
A-26	Replace exhaust manifold gasket(s).						
A-27	Replace flywheel ring gear.						
A-28	Replace flywheel and flywheel ring gear.						

REDUCED

FORM CR79

ARTICULATION COMPETENCY RECORD

Schoolcraft College District

NAME OF SCHOOL _____ COUNSELOR _____

ADDRESS _____ NAME OF PROGRAM _____

_____ OE CODE # _____

TELEPHONE _____ EXPECTED YEAR OF GRADUATION _____

STUDENT ID NO. _____ COMPLETED PROGRAM? ☐ YES ☐ NO

NAME OF STUDENT _____ HOME PHONE NO. _____
Last First Middle

ADDRESS _____ SEX: ☐ M ☐ F BIRTHDATE _____

_____ SOCIAL SECURITY NO. _____
City State Zip

DIRECTIONS The Competency Record tells what has been demonstrated. Check (✓) only those competencies (tasks) successfully completed by the above named student. DO NOT record unsuccessful attempts. (See reverse side for task checklist.)

COMMENTS _____

TEACHER SIGNATURE	COURSE	YEAR
1		
2		
3		
4		

REDUC

ARTICULATION RESEARCH PROJECT

Student Vocational Skills Record

COURSE: Fuel System Maintenance and Repair, Block 5.0

(For Instructor's File)

NAME: _____ DATE: _____

CERTIFIED BY: _____ TITLE: _____

INSTITUTION: _____

CODE	TASKS	CODE	TASKS
[U L M S]	Inspects, services, or replaces carburetor air cleaner.	[U L M S]	Inspects, services, or replaces gas tank, cap and sending unit.
[U L M S]	Cleans or replaces fuel filter units.	[U L M S]	Repairs or services carburetors.
[U L M S]	Removes, services, or replaces fuel pumps or fuel lines and hoses.	[U L M S]	Repairs or services exhaust emission control systems, to include manifold heat.
[U L M S]	Installs carburetors.	[U L M S]	Analyzes fuel injection problems by means of electrical diagnostic equipment.
[U L M S]	Inspects and measures fuel flow and pressure of system.	[U L M S]	Performs operational inspections of exhaust emission control system.
[U L M S]	Adjusts carburetor.		
[U L M S]	Inspects, cleans and adjusts choke unit (automatic and manual).		

GENERAL ATTITUDE:

[U L M S] Industrious and energetic

[U L M S] Cooperative with associates and instructors

[U L M S] Dependable

[U L M S] Punctual

CODE - Circle appropriate letter.

U - Unqualified.
L - Limited skill, requires supervision.
M - Moderate skill, requires minimum supervision.
S - Skilled, works independently.

SAMPLE - OCCUPATIONAL TASK PERFORMANCE RECORD CARD

Block 0.00 Introduction to Automotive Technology

high school = 180 hours
cc/ti = 176 hours

0.10 Shop Operation and Safety

____ L M S Know and practice shop safety.
____ L M S Know first-aid requirements for normal shop hazards.
____ L M S Identify,use properly, and maintain common hand tools.
____ L M S Identify, use properly, and maintain items of common shop equipment.
____ L M S Identify, use properly, and maintain items of common use shop machinery.
____ L M S Know performance requirements of standard shop operating procedures.

0.20 The Motor Vehicle: Assembly Identification, Assembly and Vehicle Mechanical Operation and Driver Maintenance

____ L M S Know types, purpose, application, and care of lubrication and tires.
____ L M S Know purpose, operation, major parts, and care of cooling system.
____ L M S Know purpose, operation, major parts, and care of automobile heater.
____ L M S Know purpose, operation, major parts, and care of braking system.
____ L M S Know purpose, types of fuel, system operations, major parts, and care of fuel system.
____ L M S Know purpose, operations, major parts, and care of steering system and front end.
____ L M S Know purpose, operations, major parts, and care of power train and manual transmission.
____ L M S Know purpose, operation, major parts, and care of engine.
____ L M S Know purpose, operation, major parts, and care of automobile air conditioners.
____ L M S Know purpose, operation, major parts, and care of automatic transmission.
____ L M S Know purpose, operations, major parts, and care of automothe electrical systems.

0.30 The Automotive Technician

____ L M S Know opportunities and job availability for the automotive technician.
____ L M S Know how to get a job, hold a job, and earn advancement.
____ L M S Know how to meet people and to be accepted by fellow employees.
____ L M S Know the technician's responsibilities toward his employer, the customer, and his craft.

Block 1.00 Lubrication and Vehicle Operating Maintenance

high school = 25 hours
cc/ti = 25 hours

____ L M S Changes oil and filters.
____ L M S Lubricates vehicles and equipment.
____ L M S Removes, repairs or replaces tires, and maintains equipment.
____ L M S Winterizes vehicles.

Block 2.00 Cooling System Maintenance and Repair

high school = 30 hours
cc/ti = 30 hours

____ L M S Checks coolant freezing point.
____ L M S Inspects and replaces water hoses.
____ L M S Pressurizes and inspects coolant system.
____ L M S Tests and replaces thermostat.
____ L M S Checks overflow tank and accessories.
____ L M S Removes and reinstalls radiators.
____ L M S Chemically cleans and flushes cooling system.
____ L M S Replaces water pump.
____ L M S Replaces freeze plugs.

Block 3.00 Automobile Heater Maintenance and Repair

high school = 30 hours
cc/ti = 30 hours

____ L M S Inspects and replaces defroster hose.
____ L M S Services heater control components.
____ L M S Replaces heater water control core.
____ L M S Services or replaces circulating heaters.
____ L M S Diagnoses heating system malfunctions.

Block 4.00 Braking System Maintenance and Repair

high school = 80 hours
cc/ti = 66 hours

____ L M S Adjusts brakes.
____ L M S Adjusts hand brake linkage.
____ L M S Frees up parking brake cables.
____ L M S Replaces hand brake linkage.
____ L M S Bleeds brakes.
____ L M S Inspects, repairs or replaces self adjusters.
____ L M S Replaces brake hoses and lines.
____ L M S Inspects and replaces brake pads (disc brakes).
____ L M S Inspects and replaces brake shoes.
____ L M S Inspects and turns rotor if necessary (disc brakes).
____ L M S Inspects and turns brake drums.
____ L M S Repairs or replaces wheel cylinder.
____ L M S Repairs or replaces master cylinder.
____ L M S Repairs or replaces hydraulic power cylinders and valves.
____ L M S Performs operational brake inspections.

Block 5.00 Fuel System Maintenance and Repair

high school = 55 hours
cc/ti = 55 hours

____ L M S Inspects, services, or replaces carburetor air cleaner.
____ L M S Cleans or replaces fuel filter units.
____ L M S Removes, services, or replaces fuel lines and hoses.
____ L M S Installs carburetors.
____ L M S Inspects and measures fuel flow and pressure of system.
____ L M S Adjusts carburetor.
____ L M S Inspects, cleans and adjusts choke unit (automatic and manual).
____ L M S Inspects, services, or replaces gas tank, cap and sending unit.
____ L M S Repairs and services carburetors.
____ L M S Repairs or services exhaust emission control system, to include manifold heat.
____ L M S Analyzes fuel injection problems by means of electrical diagnostic equipment.
____ L M S Performs operational inspections of exhaust emission control system.

Block 7.00 Drive Train and Manual Transmission

high school = 165 hours
cc/ti = 165 hours

____ L M S Lubricates U-joints.
____ L M S Lubricates speedometer cable drive gear and housing.
____ L M S Repairs or replaces slip-joints or U-joints.
____ L M S Replaces drive-line seals.
____ L M S Tests and replaces out-of-round drive shaft.
____ L M S Inspects drive shafts, U-joints and center bearing.
____ L M S Replaces manual transmission gaskets and seals (in-car repairs).
____ L M S Replaces pilot bearing.
____ L M S Replaces throwout bearings.
____ L M S Replaces transmission mounts.
____ L M S Adjusts mechanical-type clutch.

STUDENT PROGRESS RECORD

EVT 3371 ESSENTIAL TEACHING SKILLS IN VOCATIONAL EDUCATION

Student's Name _____ Soc. Sec. No. _____ Quarter _____

COMPETENCY	MODULE	PRODUCT REQUIRED	DATE COMPLETED	POINTS	EVALUATOR
Plan Your Performance-Based Teacher Education Program	UCF-1	Develop a Written Plan for Your Own Educational Goals			
Develop Student Performance Objectives	B-2	Develop Written Student Performance Objectives in the Cognitive, Psychomotor and Affective Domain (L.E. IV)			
Develop a Lesson Plan	B-4	Develop a Written Model Lesson Plan (L.E. IV, Final Experience)			
Select Student Instructional Materials	B-5	Develop a Written Rational For Selection of Student Instructional Materials (L.E. III, Final Experience, Special Checklist)			
Assess Student Skill in Shop/ Laboratory	D-4	Develop a Written Performance Test (L.E. II)			
Develop a Unit of Instruction	B-3	Develop a Written Unit of Instruction (L.E. IV)			
Professionalism	-	Professional Behavior as Described in the Professional Rating Scale			
Elect 1					
Demonstrate a Manipulative Skill	C-16	With a Written Lesson Plan, Demonstrate a Manipulative Skill in a Simulated Situation (L.E. II)			
Demonstrate a Concept or Principle	C-17	With a Written Lesson Plan, Demonstrate a Concept or Principle in a Simulated Situation (L.E. III)			

TOTAL

AVERAGE

UNIVERSITY OF CENTRAL FLORIDA
PERFORMANCE-BASED VOCATIONAL TEACHER EDUCATION PROGRAM

FINAL GRADE _____ _____ (signed) _____ (date)

7/79

EXAMPLE #10

REDUCED

APPENDIX H

EXAMPLE #1

SECONDARY/POST SECONDARY ARTICULATION AGREEMENT*

The purpose of this Articulation Agreement is to establish a procedure to enable vocational-technical students at the secondary level to obtain equivalency college credit for specified task competencies (skills) achieved at the secondary level.

Discipline areas to be articulated are**: _____

_____.

We, the undersigned, agree to the terms of this Articulation Agreement for a period of one (1) academic year commencing on _____, which shall continue in full force and effect unless either party notifies the other in writing of cancellation within thirty (30) days prior to the date of cancellation.

Signed at _____, this ____ day of 19___.

_____ _____

President, _____ Superintendent, _____
Community College Public Schools

* Approved by the Attorney General's office October 7, 1980

** A separate agreement will be prepared for each school division listing those disciplines which are taught in the school division.

ARTICULATION AGREEMENT

This agreement is made between the Virginia State Board of Community Colleges, _____ Community College and the _____ _____ School Division.

We hereby agree to the following:

1. Participating instructors at the secondary and post-secondary level will formally agree on, and teach from, a list of competencies (task list) based on entry level task requirements. Criteria for evaluation and procedures for recording levels of competency will also be formally agreed upon.
2. Each secondary school will maintain a competency record for each student which identifies areas and levels of task achievement. This record will become a part of the student's official record and will be forwarded to _____ Community College with the student's high school transcript.
3. Credit at _____ Community College will be granted for competencies mastered at an achievement level of 3.0 or better on a scale of 0 - 4, providing continuation of study in the program area has begun within two academic years after graduation from the secondary school.
4. No examination will be required for granting credit for achievement of a competency and no fee will be required for granting of credit.
5. Annually, prior to the end of the academic year and preferably in June, a meeting will be scheduled for each occupational area to review, and amend as necessary, the occupational task

lists, grading systems, recording forms and objective-referenced tests or criterion-referenced measures to establish levels of competency. The Director of Vocational Education of the school division, the Chairman of _____ Community College _____ Division and all participating teachers are expected to attend.

6. All participating new faculty and administrators, full-time or part-time, will have training in Competency-Based Education and will receive orientation on the articulation process described herein.
7. This agreement will be reviewed annually as stated in 5, above, and in addition will be reviewed by the President of _____ _____ Community College and the Superintendent of the school division, or their designees, each three years.
8. The purpose of this articulation agreement is to:
   1. Establish the criteria for evaluation of competencies mastered by vocational-technical students.
   2. Provide for horizontal and vertical articulation.
   3. Provide for documentation of competencies mastered.
   4. Establish a procedure for amending the materials involved in articulation.

ARTICULATION AGREEMENT*

This agreement** is made between and among the secondary schools of _____ _____ Community College and the State Board of Community Colleges for the discipline area of _____.

We hereby agree to the following:

1. That we respect each other's professional opinion in regard to the evaluation of individual student's capabilities, and that we will not question each other's ability to evaluate students and their performance.
2. That the standards established by the mutually agreed upon performance objectives will be used for student evaluation.
3. That the system for grading competencies attempted will be as follows:

   4 -- Highly proficient: Can complete task quickly and accurately can direct others in how to do task. Needs only normal supervision.

   3 -- Competent: Can do all parts of the task. Needs only spot check of completed work. Meets minimum entry level requirements. Needs job entry supervision.

   2 -- Partially proficient: Can do most parts of the task. Needs help only on hardest parts. May not meet all job entry level requirements for speed and accuracy. Needs close supervision.

   1 -- Limited: Can do simple parts of task. Needs to be told or shown how to do most of task. Needs extremely close supervision.

   0 -- Cannot perform any part of task at a level sufficient for participation in a work environment.

* Approved by the Attorney General's office October 7, 1980

** A separate agreement will be prepared for each of the disciplines of Auto Mechanics, Drafting (Mechanical Drawing), Machine Shop, Electronics Servicing and Electricity.

4. That credit will be granted, with no examination, for a competency mastered within the preceding two years at a skill level of 3 on a scale of 0 - 4, irrespective of the school at which the skill was demonstrated.
5. That the competency achievement record will become a part of the student's permanent record.
6. That annually, preferably in June, the participating instructors will meet with the representatives of the school divisions and _____ Community College to amend, as necessary, the occupational task lists, grading systems, recording forms and objective referenced tests or criterion referenced measures.

Signed at _____ this _____ day of _____ 19____.

_____ Principal, _____ High School	_____ Principal, _____ Vo-Tech Center
_____ Principal, _____ High School	_____ _____ Instructor _____ High School
_____ _____ Instructor _____ High School	_____ _____ Instructor _____ Vo-Tech Center
_____ _____ Instructor _____ _____ Community College	_____ _____ Instructor _____ _____ Community College

EXAMPLE #2

SECONDARY/POST-SECONDARY ARTICULATION AGREEMENT

_____ COMMUNITY COLLEGE DISTRICT

Statement of Intent

The purpose of this Articulation Agreement is to provide a mechanism which will enable vocational-technical programs at the secondary and post-secondary level of education to interface in order to grant equivalency college credit to students for identified task competencies achieved in secondary programs.

Participating Institutions

We, the undersigned representatives of the listed institutions, agree to the terms of this Articulation Agreement for a period of three (3) academic years after the date of signing.

Discipline Areas

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Date _____

Post-Secondary Institution

_____

Community College

Authorized Agents

_____

President

_____

Contact Person

_____

Title

Secondary Institution/s

_____

_____

_____

_____

Superintendent(s)

_____

Contact Person(s)

_____

Title(s)

ARTICLES OF AGREEMENT

Conditions

1. Each articulating student must be fully matriculated and provide _____ Community College with a copy of their intended program of study.

2. Participating teachers at the secondary school will maintain a competency record for each student which identifies areas and levels of task achievement. This record will become part of the student's permanent record and will be forwarded to _____ _____ Community College upon request by the student.

3. Articulation Agreement Review and Change:

   3.1 On or before April 1 of each academic year, a meeting will be scheduled for each occupational area in order to review occupational tasks and criterion tests used to measure levels of competency. All teachers of secondary and post-secondary occupational programs will be invited to provide input for review and revision of the tasks and tests.

   3.2 On or before May 1 of each academic year, a review of the articulation agreement and process will be conducted by a review committee. The review committee (representing each occupational area) will be determined by the chief executive officers.

4. Secondary teachers in the aforementioned disciplines will teach from a minimum set of task competencies as agreed upon. Evidence of achievement of this will be exhibited by the appropriate monitoring and certification of students in secondary programs.

5. All new full-time faculty and administrators directly involved in the _____ Community College District Articulation Agreement will be in-serviced in CBE and oriented to the articulation process.

6. Students must complete ten (10) credit hours in the intended program area with a minimum GPA of 2.0 in order to receive articulation credit.

Benefits

1. Students will receive _____ Community College equivalency credit for courses which they have demonstrated competencies for the identified tasks.

2. As in any other advanced placement, no tuition and fees for courses articulated will be charged.

3. Equivalency credit for articulated courses will appear on the transcript of _____ Community College by course title and credit hours.

EXAMPLE #3

SECONDARY/POST-SECONDARY ARTICULATION AGREEMENT

_____ Public Schools

_____
Community College

_____ Community College has agreed to grant college credit to students completing the _____ Program at _____ High School or Vocational-Technical School for the following courses:

Course	Number of Credits

The following criteria must be met in order for the students to receive the credits:

1. Students shall complete an equivalent two-year articulated _____ Program at _____ high school or vocational-technical school with an average grade of B or better.

2. Credit for the articulated courses shall be awarded upon the successful completion of the articulation credit examination with a grade of 70% or better. A letter of certification from the _____ instructor and verified by the school principal will then be issued.

3. Request by the student for the credit must be made within two years after graduation from high school.

4. The letter of certification shall mean that the student has satisfied the requirements of the articulated program at the high school or vocational-technical school. This includes the following articulated courses and competencies.

Articulated Courses	Competencies
_____	_____
	_____
	_____
	_____

Articulated Courses	Competencies

IMPLEMENTATION PROCEDURE

High School Implementation Procedures
with _____ Community College

I. Implementation Procedure at the Community College

A. To implement the articulation agreement at the community college, the following procedure is proposed:

1. The College will set up Admissions Office and Record Office procedures to handle students that are certified for credit from high school/vocational-technical school programs. (See Part I-B below for sample procedure.)

2. Program coordinators at the College will interview the students and maintain files for follow-up of students receiving the certification for credit.

B. Suggested procedure for community college admission of student with letter of certification.

1. When applying for admission to the college, the student will present the appropriate letter of certification along with the application for admission.

2. The records office at the college will grant a grade of "S" for the course(s) certified. The grade(s) will be recorded on the student's record with the notation "Credit Per Articulation Agreement," and the letter of certification retained in the student's file.

3. The college records office will forward a copy of the student's record with the course credit awarded to the program coordinator. The program coordinator will notify the high school/vocational-technical school instructor.

4. The student may register for the next course in the curriculum sequence.

II. Implementation Procedure at the High School/Vocational-Technical Schools.

A. To implement the articulation agreement at the high school/vocational-technical schools, the following procedure is proposed:

1. The division superintendent will communicate the details of all agreements to the director of vocational education, principals, teaching faculty, guidance personnel, work-study coordinators and students.

2. The division superintendent will develop methods of publicizing the agreements in order to encourage students to take advantage of this opportunity.

3. The division superintendent will develop a procedure for certifying students for credit in the course or courses for which he or she is eligible for articulation credit. The original of this letter will be given to the student and a copy will be mailed to the community college department coordinator. (See sample letter of certification.)

III. Articulation Agreement Maintenance and Review

A. The Articulation Agreement shall be reviewed at least every three years by representatives of the secondary vocational-technical programs and the community college.

B. Revisions of applicable course syllabi at any of the participating schools or community college should be sent to the applicable instructors.

Sample Letter of Articulation Certification

High School/Vocational-Technical School

TO: _____ Community College

FROM: _____ High School

RE: Student Name: Articulated Credit Certification

This is to certify that _____ has successfully completed the _____ Program as of _____. Based upon the articulation agreement, it is recomended that credit be given for the following courses: (Enrollment must occur within two years of the certification date.)

(List applicable college course(s):

_____

_____

_____

The undersigned certify that the student has met the criteria as defined in Part II of the Articulation Agreement for courses produced by representatives of _____ Public Schools or Vocational-Technical Schools and _____ Community College dated _____ and has at least a B average.

_____
Instructor

_____
Principal

(FOR COLLEGE USE ONLY)

Interview with representative of _____ Community College _____ Department

Date _____

_____
Department Representative

Verification of Credit

_____
Division Head

FOLLOW-UP PROCEDURE

In order to provide for objective evaluation of the articulation agreement, the following procedures are agreed upon to develop a greater understanding of each institution's progress and allow for a more precise evaluation of student accomplishment:

1. The program coordinator in the _____ Department at the College will maintain records of students certified for articulated credit.

2. Progress of students receiving credit will be monitored annually until completion of the program or termination.

3. Progress of each student will be provided annually to the recommending teacher.

4. At the end of two (2) years, the articulation agreement will be evaluated and thereafter on an annual basis, to include the following for participating students:

   a. Number of students who complete the degree or certification program.

   b. Number of students who withdraw from the program.

   c. Number of high school and vocational-technical students who select the Articulation Program rather than the _____ _____ Community College credit-by-examination.

   d. Percentage of _____ Articulation Program students who find related employment and/or continue educational goals.

   e. A copy of the annual report will be sent to the Director of Vocational Education of _____ county, the _____ Community College Division Head, and the Director of Public Schools.

5. At the end of three years, the Coordinator of Guidance for both agencies will sponsor a meeting to re-evaluate the Articulation Agreement.

STUDENT EVALUATION

Name _____

Quarter: Fall _____ Winter _____ Spring _____ Summer _____ Year _____

High School/Vocational-Technical School Attended: _____

_____

Credit Per Articulation Agreement:

Course Number	Credit Per Articulation Agreement

College Major _____

Courses Completed:

Course Number	Course Title	Grade

Overall Q.C.A. _____

Comments:

COOPERATIVE PROGRAMS

Cooperative training programs are available at both secondary and post-secondary levels. Students with approved training plans may earn academic credit for mastery of merchandising competencies on the job. Documentation of competence by coordinator is required.

WORK EXPERIENCE CREDIT

Students who enter the merchandising program after work experience in a merchandising job may receive academic credit for competencies mastered on the job. Documentation of competence by job supervisor is required.

ARTICULATION AGREEMENT

Upon documentation of mastery of merchandising competencies, students will be awarded academic credit by Schoolcraft Community College toward program completion.

DECA/COLLEGIATE DECA

Certain merchandising competencies at both the secondary and post-secondary level will be completed through involvement in Distributive Education Clubs of America activities.

SCHOOLCRAFT
COMMUNITY COLLEGE REGION

Merchandising Program

APPENDIX I

A High School/Community College
Articulated Program

PARTICIPATING SCHOOLS:

Schoolcraft Community College
George Washington High School
Thomas Jefferson High School
Woodrow Wilson High School
Schoolcraft Vocational-Technical Center

High School Courses

Distributive Education I
Distributive Education II
Distributive Education III

Secondary Certificate → **MERCHANDISING**

ENTRY AND CAREER DEVELOPMENT LEVEL EMPLOYMENT

Cashier Checker
Stock Clerk
Sales Person
Counter Attendant

↓

First Year Community College

Introduction to Business
Principles of Marketing
Principles of Selling
Sales Promotion and Customer Relations
Retail Organization and Management
Others

Post-Secondary Certificate → **MERCHANDISING**

SUPERVISORY LEVEL EMPLOYMENT

Head Cashier
Assistant Department Managers
Training Representative
Floor Supervisor

↓

Second Year Community College

Fashion Merchandising
Merchandise Buying and Control
Advance Selling Techniques
Principles of Advertising
Merchandise Information
Others

A.A.S. Degree → **MERCHANDISING**

MID-MANAGEMENT LEVEL EMPLOYMENT

Department Manager
Assistant Retail Buyer
Sales Representative
Store Management Trainee

↓

Continuing Education Programs

ARE YOU . . .

LOOKING FOR A CAREER THAT —

. . . offers a challenge
. . . is interesting
. . . provides for rapid promotions
. . . is secure and growing

DO YOU

Enjoy meeting and working with people?

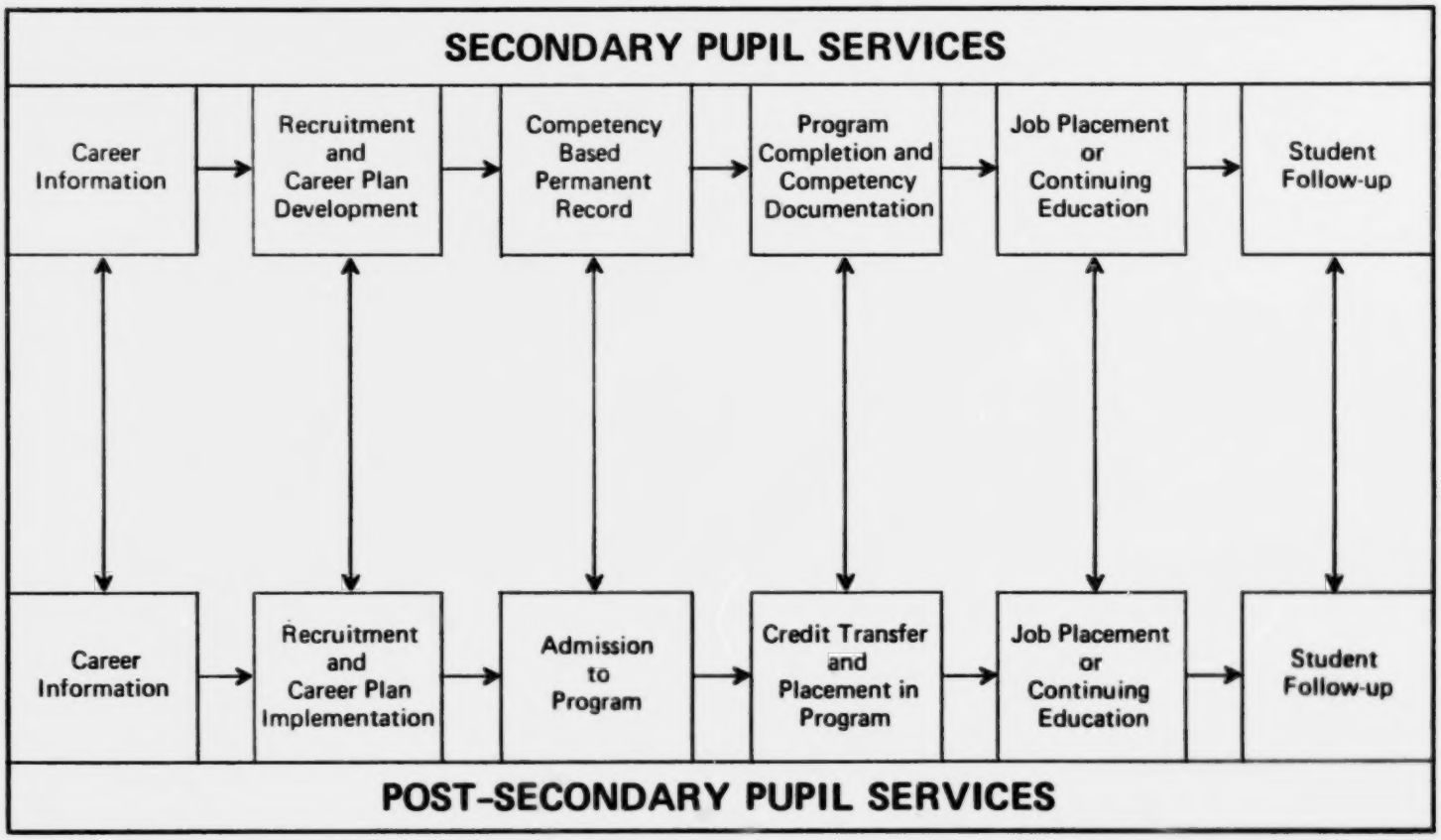
Want a career in sales, display, advertising or business administration?

WOULD YOU . . .

Want to get an early start on a future career by working and attending school at the same time?

HAVE YOU EVER CONSIDERED A MERCHANDISING CAREER?

COORDINATED STUDENT SERVICES FOR STUDENTS IN ARTICULATED VOCATIONAL PROGRAMS



APPENDIX K

REFERENCE MATERIALS FOR ARTICULATION

1. Agee, P. "Florida Moves to Competency Testings," SCHOOL SHOP. April, 1980, (1 p.)

2. THE ANNUAL AND LONG RANGE STATE PLAN FOR VOCATIONAL EDUCATION IN MICHIGAN. Michigan Department of Education, 1978. (176 pp.)

3. Andreyka, R. "CBE Links Vocational Schools," SCHOOL SHOP. April, 1980, (2 pp.)

4. AN ANNOTATED BIBLIOGRAPHY OF ERIC DOCUMENTS ON ARTICULATION (Brief). Prepared for the Regional Conference on Education for Work: Who, What, When, Where, and Why? Las Vegas, Nevada.

5. Artis, M. J. PROJECT MAVE (MODEL FOR ARTICULATED VOCATIONAL EDUCATION). Springfield, IL: Illinois Office of Education, 1977. (213 pp.)

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